



# UNISONIC

# DISCRETEs

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# TRANSISTOR

## Bipolar Transistor

Part No.		Maximum Ratings			Electrical Characteristics							Package
NPN	PNP	BV <sub>CEO</sub> (V)	BV <sub>CBO</sub> (V)	I <sub>c</sub> (A)	h <sub>FE</sub>				V <sub>CE(Sat)</sub> (V)			
					SPEC.		Conditions		SPEC.		Conditions	
					MIN.	MAX.	I <sub>c</sub> (mA)	V <sub>CE</sub> (V)	MAX.	I <sub>c</sub> (mA)	I <sub>B</sub> (mA)	
2SC4774	-	6	12	0.05	270	560	5	5	0.30	10	1	SOT-323 SOT-23
2SC5765	-	10	15	5.00	450	700	500	1.5	0.27	3000	60	TO-92SP SOT-23 TO-92 TO-252
2SC5889	-	10	15	5.00	450	1200	500	2	0.35	3000	60	TO-92SP SOT-23 TO-92 TO-252
2SD2470	-	10	15	5.00	270	820	2000	2	0.50	3000	100	SOT-89 TO-92SP TO-92 SOT-23 TO-252
-	2SA1300	10	20	2.00	140	600	500	1	0.50	2000	50	SOT-89 TO-92 SOT-23 SOT-363
2SD879	-	10	30	3.00	140	400	3000	2	0.40	3000	60	SOT-89 TO-92SP TO-92 SOT-23
2SC3838	-	11	20	0.05	56	400	5	10	0.50	10	5	SOT-23 SOT-323 SOT-523 SOT-723
-	UP1868	12	15	6.00	300	1000	500	1	0.10	500	5	SOT-223 SOT-26
2SC3355	-	12	20	0.10	50	300	20	10	-	-	-	SOT-23 TO-92 SOT-26
2SC3356	-	12	20	0.10	50	300	20	10	-	-	-	SOT-23 TO-92 SOT-26
9018	-	15	30	0.05	28	198	1	5	0.50	10	1	SOT-723 SOT-523 SOT-323 SOT-23 TO-92
MMBT9018	-	15	30	0.05	28	198	1	5	0.50	10	1	SOT-723 SOT-523 SOT-323 SOT-23 TO-92
UN1066	-	15	20	6.00	250	-	5000	0.5	0.18	1500	30	SOT-89 SOT-223 TO-252
-	UP2518	20	20	1.50	300	450	100	2	0.04	100	10	SOT-23 SOT-89 SOT-223 TO-92
UN1518	-	20	20	2.50	300	450	200	2	0.15	1000	10	SOT-23 SOT-89
-	2SB1424	20	20	3.00	120	390	100	2	0.50	2000	100	SOT-89 SIP-3
2SD468	2SB562	20	25	1.00	85	240	500	2	0.50	800	80	TO-92 TO-92NL
8050S	8550S	20	30	0.70	120	400	150	1	0.50	500	50	SOT-323 SOT-23 TO-92
S8050	S8550	20	30	0.70	120	400	150	1	0.50	500	50	TO-92 SOT-89
BCP68	BCP69	20	32	1.00	85	375	500	1	0.50	1000	100	SOT-223
-	2SB1412	20	30	5.00	82	390	500	2	1.00	4000	100	TO-251 TO-252
2SC3519*	2SB1386	20	30	5.00	82	390	500	2	1.00	4000	100	SOT-89
9013	9012	20	40	0.50	64	300	50	1	0.60	500	50	TO-92 SOT-23
MMBT9013	MMBT9012	20	40	0.50	64	300	50	1	0.60	500	50	SOT-23
M28S	-	20	40	1.25	300	1000	100	1	0.55	600	20	SOT-23 TO-92
2SD965	-	20	40	5.00	230	800	500	2	1.00	3000	100	SOT-89 TO-92 TO-252
D965SS	-	20	40	5.00	230	800	500	2	1.00	3000	100	SOT-23 SOT-89
MMBTH10	-	25	30	0.05	60	-	4	10	0.50	4	0.4	SOT-523 SOT-323 SOT-23 SOT-723
MPSH10	-	25	30	0.05	60	-	4	10	0.50	4	0.4	TO-92 SOT-723 SOT-523 SOT-323 SOT-23
2N5089	-	25	30	0.10	400	1200	0.1	5	0.50	10	1	TO-92
MMBT5089	-	25	30	0.10	400	1200	0.1	5	0.50	10	1	SOT-323 SOT-523 SOT-23
BC338	BC328	25	30	0.80	100	630	100	1	0.70	500	50	TO-92
BC818*	BC808	25	30	0.80	100	630	100	1	0.70	500	50	SOT-523 SOT-323 SOT-23
2SD999*	2SB798	25	30	1.00	90	400	100	1	0.40	1000	100	SOT-89
HE8050	HE8550	25	40	1.50	85	500	100	1	0.50	800	80	SOT-23 SOT-89 TO-92 TO-92NL
HE8051	HE8551	25	40	1.50	85	500	100	1	0.50	800	80	TO-92

PNP (-) 符號省略

# TRANSISTOR

Part No.		Maximum Ratings			Electrical Characteristics							Package
NPN	PNP	BV <sub>CEO</sub> (V)	BV <sub>CBO</sub> (V)	I <sub>c</sub> (A)	h <sub>FE</sub>				V <sub>CE(Sat)</sub> (V)			
					SPEC.		Conditions		SPEC.	Conditions		
					MIN.	MAX.	I <sub>c</sub> (mA)	V <sub>CE</sub> (V)	MAX.	I <sub>c</sub> (mA)	I <sub>B</sub> (mA)	
X1049A	-	25	80	4.00	300	1200	1000	2	0.13	1000	10	TO-92 SOT-89
BC548	BC558	30	30	0.10	110	800	2	5	0.25/0.30	10	0.5	TO-92
BC848	BC858	30	30	0.10	110	800	2	5	0.25/0.30	10	0.5	SOT-23 SOT-323 SOT-523
BC849	BC859*	30	30	0.10	110	800	2	5	0.25/0.30	10	0.5	SOT-23 SOT-323 SOT-523
2SC2328A	2SA928A	30	30	2.00	100	320	500	2	2.00	1500	30	TO-92 TO-92NL
2N5088	-	30	35	0.10	300	900	0.1	5	0.50	10	1	TO-92
MMBT5088	-	30	35	0.10	300	900	0.1	5	0.50	10	1	SOT-523 SOT-323 SOT-23
-	2SB1188	30	40	3.00	100	400	1000	2	0.50	2000	200	SOT-23 SOT-89 TO-252
2SD882	2SB772	30	40	3.00	100	400	1000	2	0.50	2000	200	SOT-223 TO-126 TO-92NL TO-126C TO-251 TO-252
2SD882S	2SB772S	30	40	3.00	100	400	1000	2	0.50	2000	200	SOT-89 SOT-223 TO-92
D882SS	B772SS	30	40	3.00	100	400	1000	2	0.50	2000	200	SOT-23
2SD965A	-	30	40	5.00	230	800	500	2	1.00	3000	100	SOT-89 TO-92 TO-252
D965ASS	-	30	40	5.00	230	800	500	2	1.00	3000	100	SOT-23 SOT-89
2SD1664	2SB1132	32	40	1.00	82	390	100	3	0.40/0.50	500	50	SOT-89 TO-252
-	2SB1182	32	40	2.00	120	390	500	3	0.80	2000	200	TO-252
2N3904	2N3906	40	60/40	0.20	100	300	10	1	0.30/0.40	50	5	TO-92 SOT-323 SOT-23 SOT-23-3
MMBT3904	MMBT3906	40	60/40	0.20	100	300	10	1	0.30/0.40	50	5	SOT-23 SOT-323 SOT-523
2N4401	2N4403	40	60/40	0.60	100	300	150	1/2	0.40	150	15	TO-92 SOT-23 SOT-23-3
MMBT4401	MMBT4403	40	60/40	0.60	100	300	150	1/2	0.40	150	15	SOT-23 SOT-323 SOT-523
PZT2222A	PZT2907A	40/60	75/60	0.60/ 0.80	100	300	150	10	0.30/0.40	150	15	SOT-223 SOT-323 SOT-23 SOT-23-3
MMBT2222A	MMBT2907A	40/60	75/60	0.60/ 0.80	100	300	150	10	0.30/0.40	150	15	SOT-523 SOT-323 SOT-23
PN2222A	PN2907A	40/60	75/60	0.60/ 0.80	100	300	150	10	0.30/0.40	150	15	SOT-89 TO-92 SOT-323 SOT-23 SOT-23-3
BCX70	-	45	45	0.20	380	630	2	5	0.35	10	0.25	SOT-523 SOT-323 SOT-23
BD135*	BD136	45	45	1.50	40	250	150	2	0.50	500	50	TO-126 TO-126C TO-251
9014	9015	45	50	0.10	60	1000/ 600	1	5	0.30/0.70	100	5	TO-92
MMBT9014	MMBT9015	45	50	0.10	60	1000/ 600	1	5	0.30/0.70	100	5	SOT-523 SOT-323 SOT-23
BC547	BC557	45	50	0.10	110	800	2	5	0.25/0.30	10	0.5	SOT-523 SOT-323 SOT-23 TO-92
BC847	BC857	45	50	0.10	110	800	2	5	0.25/0.30	10	0.5	SOT-523 SOT-323 SOT-23
BC850	BC860*	45	50	0.10	110	800	2	5	0.25/0.30	10	0.5	SOT-523 SOT-323 SOT-23
BC337	BC327	45	50	0.80	100	630	100	1	0.70	500	50	SOT-323 SOT-23 TO-92
BC817	BC807	45	50	1.50/ 0.80	100	600/630	100	1	0.70	500	50	SOT-523 SOT-323 SOT-23
TC200	-	45	60	0.50	70	240	50	2	0.25	100	10	TO-92
2SC2655	2SA1020	50	50	2.00	70	240	500	2	0.50	1000	50	SOT-23 TO-92
2SD886*	2SB776	50	50	3.00	100	400	1000	2	0.50	2000	200	TO-251 TO-252
2SC1815	2SA1015	50	60/50	0.15	70/120	700	2	6	0.25/0.30	100	10	TO-92
MMBT1815	MMBT1015	50	60/50	0.15	120	700	2	6	0.25/0.30	100	10	SOT-23 SOT-113 SOT-323 SOT-523 SOT-723

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Part No.		Maximum Ratings			Electrical Characteristics							Package
NPN	PNP	BV <sub>CEO</sub> (V)	BV <sub>CBO</sub> (V)	I <sub>c</sub> (A)	h <sub>FE</sub>				V <sub>CE(Sat)</sub> (V)			
					SPEC.		Conditions		SPEC.	Conditions		
					MIN.	MAX.	I <sub>c</sub> (mA)	V <sub>CE</sub> (V)	MAX.	I <sub>c</sub> (mA)	I <sub>B</sub> (mA)	
2SC2712	2SA1162*	50	60/50	0.15	70	700/400	2	6	0.25/0.30	100	10	SOT-23 SOT-323 SOT-523 SOT-723 SIP-3
2SC4672	2SA1797	50	60/50	2.00	120	400	500	2	0.35	1000	50	SOT-89 SOT-323
2SC4617	2SA1774	50	60	0.15	120	560	1	6	0.40/0.50	50	5	SOT-23 SOT-523 SOT-323 SOT-723 SIP-3
2SC945	2SA733	50	60	0.15	90	600	1	6	0.30	100	10	TO-92 TO-92SP SOT-723
MMBT945	MMBT733*	50	60	0.15	90	600	1	6	0.30	100	10	SOT-23 SOT-323 SIP-3
KSC945	-	50	60	0.15	40	700	1	6	0.30	100	10	TO-92 SOT-23 SOT-323 SOT-523 SOT-723
2SC1384	2SA684	50	60	1.00	85	340	500	10	0.40	500	50	SOT-89 TO-92NL
2SD1616	2SB1116	50	60	1.00	135	600	100	2	0.30/0.20	1000	50	SOT-89 TO-92 TO-92SP SIP-3
MMBT1616	MMBT1116	50	60	1.00	135	600	100	2	0.30	1000	50	SOT-23
2SD874A*	2SB766A	50	60	1.00	85	340	500	10	0.40	500	50	SOT-89
2SD1624	2SB1124*	50	60	3.00	100	560	100	2	0.50/0.70	2000	100	SOT-89 SOT-23 TO-92
2SD1060	2SB824	50	60	5.00	70	360	1000	2	0.40	3000	300	SOT-89 TO-92 TO-126 TO-251 TO-252 TO-220
2SC2562*	2SA1012	50	60	5.00	70	360	1000	1	0.40	3000	150	TO-251 TO-252 TO-220 TO-220F
2SC5569	2SA2016	50	80/50	7.00	200	560	500	2	0.17/0.40	2000	40	SOT-89 SOT-323
MMBTA05	MMBTA55	60	60	0.50	100	-	10	1	0.25	100	10	SOT-323 SOT-23
MPSA05	MPSA55	60	60	0.50	100	-	10	1	0.25	100	10	TO-92 SOT-323
2SD1616A	2SB1116A	60	120/80	1.00	135	400	100	2	0.30/0.20	1000	50	SOT-89 TO-92 TO-92SP SIP-3
MMBT1616A	MMBT1116A	60	120/80	1.00	135	400	100	2	0.30/0.20	1000	50	SOT-23
BD137	BD138	60	60	1.50	40	250	150	2	0.50	500	50	TO-126 TO-126C TO-251
-	UP1851	60	100	5.00	100	300	2000	1	0.05	100	10	SOT-223 TO-92NL TO-252
BC546	BC556	65	80	0.10	110	800	2	5	0.25/0.30	10	0.5	TO-92
BC846	BC856	65	80	0.10	110	800	2	5	0.25/0.30	10	0.5	SOT-23 SOT-323 SOT-523
2SD1782	2SB1198	80	80	0.50	120	390	100	3	0.50	500	50	SOT-23 SOT-89
MMBTA06	MMBTA56	80	80	0.50	100	-	10	1	0.25	100	10	SOT-23 SOT-23-3
MPSA06	MPSA56	80	80	0.50	100	-	10	1	0.25	100	10	TO-92 SOT-23 SOT-23-3
PZTA06*	PZTA56*	80	80	0.50	100	-	10	1	0.25	100	10	SOT-223 SOT-23 SOT-23-3
-	PZT4033	80	80	1.00	100	300	100	5	0.15	150	15	SOT-223
2SC3669	2SA1429*	80	80	2.00	70	240	500	2	0.50	1000	50	TO-251 TO-252
-	2SB1017	80	80	4.00	40	240	500	5	1.70	3000	300	TO-220F
2SD1898	2SB1260	80	100/80	1.00	82	390	500/100	3	0.40	500	20/50	SOT-89 TO-252 SIP-3
BD139	BD140	80	100/80	1.50	63/40	250	150	2	0.50	500	50	TO-126 TO-126C TO-251 TO-263
BD237	BD238	80	100	2.00	40	-	150	2	0.60	1000	100	TO-126S
-	2SB647	80	120	1.00	60	320	150	5	1.00	500	50	TO-92NL
MN2510	MP2510	100	100	25.00	40	120	12000	4	1.50	12000	1200	TO-3P
2N6718	-	100	100	1.00	50	300	250	1	0.35	350	35	SOT-89 TO-92 TO-126C
2SD667	-	100	120	1.00	140	330	150	2	0.50	500	50	TO-92NL
2SC3647	-	100	120	2.00	100	400	100	5	0.40	1000	100	SOT-89

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Part No.		Maximum Ratings			Electrical Characteristics							Package
NPN	PNP	BV <sub>CEO</sub> (V)	BV <sub>CBO</sub> (V)	I <sub>c</sub> (A)	h <sub>FE</sub>				V <sub>CE(Sat)</sub> (V)			
					SPEC.		Conditions		SPEC.		Conditions	
					MIN.	MAX.	I <sub>c</sub> (mA)	V <sub>CE</sub> (V)	MAX.	I <sub>c</sub> (mA)	I <sub>B</sub> (mA)	
UP1753	-	100	200	6.00	100	300	2000	2	0.15	2000	100	SOT-223
2SC2881	2SA1201	120	120	0.80	80	240	100	5	1.00	500	50	SOT-89
2SC2235	2SA965*	120	120	0.80	80	240	100	5	1.00	500	50	TO-92NL
2SD1857	2SB1236*	120	120	2.00	82	390	100	5	0.40	1000	100	TO-92 TO-92NL
-	UP1855	140	180	4.00	100	300	1000	5	0.15	1000	100	SOT-223
-	UP2855	140	180	4.00	100	300	1000	5	0.12	1000	100	SOT-223
2SC2073	-	150	150	1.50	40	140	500	10	1.50	500	50	TO-220
2SC2383	-	160	160	1.00	60	320	200	5	1.50	500	50	TO-92
-	2SA1013	160	160	1.00	60	320	200	5	1.50	500	50	SOT-89 TO-92 TO-92NL
2N5551	2N5401	160/150	180/160	0.60	80	400	10	5	0.20/0.50	50	5	SOT-89 TO-92
MMBT5551	MMBT5401	160/150	180/160	0.60	80	400	10	5	0.20/0.50	50	5	SOT-23
PZT5551	PZT5401	160/150	180/160	0.60	80	400	10	5	0.20/0.50	50	5	SOT-223
-	UP1855A	170	180	4.00	100	300	1000	5	0.15	1000	100	SOT-223
MMBTA43	MMBTA93*	200	200	0.50	80	300/-	10	10	0.20/0.50	20	2	SOT-323 SOT-23
MPSA43	MPSA93	200	200	0.50	80	300/-	10	10	0.20/0.50	20	2	SOT-89 TO-92
PZTA43	PZTA93	200	200	0.50	80	300/-	10	10	0.20/0.50	20	2	SOT-223
BF422	BF423	250	250	0.05	50	-	25	20	0.6	30	5	TO-92
2SC2482	-	300	300	0.10	30	150	20	10	1.00	10	1	TO-92NL SOT-223 SOT-23 SOT-23-3
2SC2688	-	300	300	0.20	40	250	10	10	1.50	20	5	TO-126 TO-126C
2SC3468	-	300	300	0.10	40	320	10	10	0.60	20	2	SOT-89 SOT-23 SOT-23-3 SOT-223
MMBTA42	MMBTA92	300	300	0.50	80	300/-	10	10	0.20/0.50	20	2	SOT-23
MPSA42	MPSA92	300	300	0.50	80	300/-	10	10	0.20/0.50	20	2	SOT-89 TO-92
PZTA42	PZTA92	300	300	0.50	80	300/-	10	10	0.20/0.50	20	2	SOT-223
MPSA42M*	MPSA92M	300	300	0.80	80	300/-	10	10	0.20/0.50	20	2	TO-92
-	BF488	350	350	0.10	50	-	25	20	0.50	20	2	TO-92
MMBTA45	-	350	400	0.30	50	240	10	10	0.50	10	1	SOT-23
MPSA45	-	350	400	0.30	82	240	10	10	0.50	10	1	SOT-89 TO-92 TO-126
PZTA45	-	350	400	0.30	50	240	10	10	0.50	10	1	SOT-223
2SC4548	-	400	400	0.20	60	200	50	10	0.6*	50	5	SOT-89
-	2SA1700	400	400	0.20	60	200	50	10	0.80	50	5	TO-251 TO-252
-	2SA1740	400	400	0.20	60	200	50	10	0.80*	50	5	SOT-89
-	KSA1625	400	400	0.30	70	300	10	10	0.20	10	1	TO-92
-	MPSA194	400	400	0.80	50	800	20	10	0.20	20	4	TO-92
MMBTA44	MMBTA94	400	500/400	0.30	50/70	240/300	10	10	0.50/0.20	10	1	SOT-23
MPSA44	MPSA94	400	500/400	0.30	82/70	240/300	10	10	0.50/0.20	10	1	SOT-89 TO-92 TO-126
PZTA44	PZTA94	400	500/400	0.30	50/70	240/300	10	10	0.50/0.20	10	1	SOT-223
MPSA44H	-	400	800	0.30	82	240	10	10	0.50	10	1	SOT-89 TO-92
-	2SA1627	600	600	1.00	30	120	100	5	0.50	300	60	TO-126
-	2SA1627A	600	600	1.00	30	120	100	5	1.50	300	60	TO-126 TO-126C TO-252

PNP (-) 符號省略

# TRANSISTOR

## Special Low Vce(sat) Transistor

Part No.		Maximum Ratings			Electrical Characteristics							Package
NPN	PNP	BV <sub>CEO</sub> (V)	BV <sub>CBO</sub> (V)	I <sub>c</sub> (A)	h <sub>FE</sub>				V <sub>CE(Sat)</sub> (V)			
					SPEC.		Conditions		SPEC.	Conditions		
					MIN.	MAX.	I <sub>c</sub> (mA)	V <sub>CE</sub> (V)	MAX.	I <sub>c</sub> (mA)	I <sub>B</sub> (mA)	
-	UP1868	12	15	6.00	300	1000	500	1	0.10	500	5	SOT-223 SOT-26
UN1066	-	15	20	6.00	250	-	5000	0.5	0.18	1500	30	SOT-89 SOT-223 TO-252
-	UP2518	20	20	1.50	300	450	100	2	0.04	100	10	SOT-23 SOT-89 SOT-223 TO-92
UN1518	-	20	20	2.50	300	450	200	2	0.15	1000	10	SOT-23 SOT-89
X1049A	-	25	80	4.00	300	1200	1000	2	0.13	1000	10	TO-92 SOT-89
-	STD888	30	60	5.00	150	300	500	1	0.15	500	5	TO-252
USS4240*	USS5240*	40	40	2.00	250/210	-	1000	2	0.32/0.35	2000	200	SOT-89 SOT-223
USS4540*	USS5540*	40	40	4.00	250/150	-	2000	2	0.29/0.34	4000	200	SOT-89 SOT-223
2SD1060	2SB824	50	60	5.00	70	360	1000	2	0.40	3000	300	SOT-89 TO-92 TO-126 TO-251 TO-252 TO-220
-	USS5350	50	50	3.00	200	450	1000	2	0.18	1000	50	SOT-26 SOT-89 SOT-223
USS4350	-	50	60	3.00	200	-	1000	2	0.17	1000	50	SOT-26 SOT-89 SOT-223
USS4450	-	50	60	3.00	200	-	1000	2	0.17	1000	50	SOT-89 SOT-223 TO-251 TO-252
USS4750*	USS5750*	50	60	7.00	200	-	2800	2	0.40	7000	700	TO-251 TO-252
-	UP1851	60	100	5.00	100	300	2000	1	0.05	100	10	SOT-223 TO-92NL TO-252
UP1753	-	100	200	6.00	100	300	2000	2	0.15	2000	100	SOT-223
-	UP1855	140	180	4.00	100	300	1000	5	0.15	1000	100	SOT-223
-	UP2855	140	180	4.00	100	300	1000	5	0.12	1000	100	SOT-223
-	UP1855A	170	180	4.00	100	300	1000	5	0.15	1000	100	SOT-223

PNP (-) 符號省略

## Bipolar Power Transistor

Part No.		Maximum Ratings			Electrical Characteristics							Package
NPN	PNP	BV <sub>CEO</sub> (V)	BV <sub>CBO</sub> (V)	I <sub>c</sub> (A)	h <sub>FE</sub>				V <sub>CE(Sat)</sub> (V)			
					SPEC.		Conditions		SPEC.	Conditions		
					MIN.	MAX.	I <sub>c</sub> (mA)	V <sub>CE</sub> (V)	MAX.	I <sub>c</sub> (mA)	I <sub>B</sub> (mA)	
-	MJD210	25	40	5.00	45	180	2000	1	0.30	500	50	TO-126 TO-126C TO-220 TO-251 TO-252 TO-263
-	D45H2	30	-	10.00	100	-	10000	1	1.00	10000	100	TO-220 TO-263
-	D65H2	30	-	15.00	100	-	10000	1	0.60	10000	100	TO-220 TO-263
-	SB2202	30	40	3.00	100	400	1000	2	0.50	2000	200	TO-251 TO-252
2SD1802	2SB1202	50	60	3.00	100	560	100	2	0.50/0.70	2000	100	TO-126C TO-251 TO-252
2SD1803	-	50	60	5.00	70	400	500	2	0.40	3000	150	TO-251 TO-252 DFN5X6-8L
2SD1804	2SB1204*	50	60	8.00	70	400	500	2	0.40	4000	200	TO-220 TO-251 TO-252
2SD2136	-	60	60	3.00	40	250	1000	4	1.20	3000	375	TO-126 TO-126C
2SD313	-	60	60	3.00	40	320	1000	2	1.00	2000	200	TO-220 TO-220F TO-263
2SD880	-	60	60	3.00	100	200	500	5	1.00	3000	300	TO-220
-	2SB834	60	60	3.00	60	300	500	5	1.00	3000	300	TO-126 TO-220 TO-220F TO-252
2SD1691	2SB1151	60	60	5.00	160	400	2000	1	0.30	2000	200	TO-126 TO-126C TO-220 TO-220F1

PNP (-) 符號省略

# TRANSISTOR

Part No.		Maximum Ratings			Electrical Characteristics							Package
NPN	PNP	BV <sub>CEO</sub> (V)	BV <sub>CBO</sub> (V)	I <sub>c</sub> (A)	h <sub>FE</sub>				V <sub>CE(Sat)</sub> (V)			
					SPEC.		Conditions		SPEC.	Conditions		
					MIN.	MAX.	I <sub>c</sub> (mA)	V <sub>CE</sub> (V)	MAX.	I <sub>c</sub> (mA)	I <sub>B</sub> (mA)	
2N3055	2N2955	60	100	15.00	20	70	4000	4	1.10	4000	400	TO-3
MJE3055T	MJE2955T	60	70	10.00	20	100	4000	4	1.10	4000	400	TO-220 TO-251 TO-252
2N3772	-	60	100	30.00	15	60	10000	4	1.40	10000	1500	TO-3
-	2SA1693	80	80	6.00	50	180	2000	4	1.50	2000	200	TO-3P
HJ44H11	-	80	80	8.00	60	-	2000	1	1.00	8000	400	SOT-223 TO-220 TO-251 TO-252
2SC4466	-	80	120	6.00	50	180	2000	4	1.50	2000	200	TO-3P
2SD1816	2SB1216*	100	120	4.00	70	400	500	5	0.40/0.50	2000	200	TO-251 TO-252 TO-220F
PZT1816		100	120	4.00	70	400	500	5	0.40	2000	200	SOT-223 TO-251 TO-252
TIP31C	TIP32C	100	100	3.00	10	50	3000	4	1.20	3000	375	TO-126 TO-220 TO-252
TIP35C	TIP36C	100	100	25.00	55	160	1500	5	1.80	15000	1500	TO-3P
TIP41C	TIP42C	100	100	6.00	15	75	3000	4	1.50	6000	600	TO-220 TO-220F
-	TIP42C-Q	100	100	6.00	15	75	3000	4	1.50	6000	600	TO-220
-	2SB857	100	130	4.00	60	320	1000	4	1.00	2000	200	TO-126C TO-220 TO-251 TO-252
-	UP1853	100	140	5.00	100	300	1000	1	0.22	2000	200	SOT-223
-	2SA1694	120	120	8.00	50	180	3000	4	1.50	3000	300	TO-3P
2SC4467	-	120	160	8.00	50	-	3000	4	1.50	3000	300	TO-3P
2SD669	2SB649	120	180	1.50	60	320	150	5	1.00	600	50	SOT-89 SOT-223 TO-92 TO-92NL TO-251 TO-252 TO-126C TO-126
2SC3834	-	120	200	7.00	70	220	3000	4	0.50	3000	300	TO-220
2SC3835	-	120	200	7.00	70	220	3000	4	0.50	3000	300	TO-3P
2SD718	2SB688	120	120	10.00	55	160	1000	5	2.00/2.50	6000/5000	600/500	TO-3P
2N3773	2N6099	140	160	16.00	15	60	8000	4	1.40	8000	800	TO-3
BU407	-	150	330	7.00	35	200	2000	5	1.00	5000	500	TO-220
2SD1609	2SB1109*	160	160	0.10	60	320	10	5	2.00	30	3	TO-126 TO-126C
2SC3648	-	160	180	0.70	100	400	100	5	0.40	250	25	SOT-89
-	2SA1507	160	180	1.50	100	400	100	5	0.50	500	50	TO-126
2SC4027	2SA1522*	160	180	1.50	100	400	100	5	0.45	500	50	TO-251 TO-252
2SD669A	2SB649A	160	180	1.50	60	320/200	150	5	1.00	600	50	SOT-89 SOT-223 TO-92 TO-92NL TO-251 TO-252 TO-126C TO-126
UN1596	-	180	180	0.50	500	-	100	5	*0.20	100	2	SOT-223
-	UP1496	200	220	0.30	85	300	250	10	0.35	250	25	SOT-23
-	UP1856	200	220	2.00	100	300	1000	5	0.165	1000	100	SOT-223
BU406	-	200	400	7.00	70	240	500	10	1.00	5000	500	TO-220 TO-220F TO-3P
-	2SA1837	230	230	1.00	100	320	100	5	1.50	500	50	TO-220F TO-220F1
2SC4793	-	230	230	1.00	100	320	100	5	1.50	500	50	TO-220F
2SC5200	2SA1943	230	230	15.00	55	160	1000	5	3.00	8000	800	TO-3P TO-3PL

PNP (-) 符號省略



# TRANSISTOR

## High Voltage Switching Transistor

Part No.		Maximum Ratings			Electrical Characteristics							Package
NPN	PNP	BV <sub>CEO</sub> (V)	BV <sub>CBO</sub> (V)	I <sub>c</sub> (A)	h <sub>FE</sub>				V <sub>CE(Sat)</sub> (V)			
					SPEC.		Conditions		SPEC.	Conditions		
					MIN.	MAX.	I <sub>c</sub> (mA)	V <sub>CE</sub> (V)	MAX.	I <sub>c</sub> (mA)	I <sub>B</sub> (mA)	
D4120P	-	200	350	1.50	8	50	200	5	0.50	400	100	TO-92 TO-126 TO-126C
4124D	-	200	350	2.00	8	50	200	5	0.80	500	100	TO-92 TO-126 TO-126C
4126D	-	200	350	3.00	8	50	500	5	0.80	1000	200	TO-92 TO-126 TO-251
4128D	-	200	350	5.00	8	50	800	5	0.80	1000	200	TO-126 TO-126C
4124	-	200	400	1.50	10	60	200	10	0.50	400	100	TO-92 TO-126 TO-126C
4126	-	200	400	3.00	10	60	500	10	0.50	500	100	TO-92 TO-126 TO-126C
4128	-	200	400	5.00	10	60	500	10	0.80	1000	200	TO-126 TO-126C
MJE13001	-	400	600	0.20	10	70	20	20	0.50	50	10	TO-92 SOT-89 SOT-223
MJE13001Q*	-	400	600	0.20	10	70	20	20	0.50	50	10	TO-92 SOT-89 SOT-223
MJE13001E*	-	400	600	0.20	10	70	20	20	0.50	50	10	TO-92 SOT-89 SOT-223
MJE13001S*	-	400	600	0.20	10	70	20	20	0.50	50	10	TO-92 SOT-89 SOT-223
MJE13001-P	-	400	600	0.20	10	70	20	20	0.50	50	10	TO-92 SOT-89 SOT-223
MJE13002	-	300	600	1.50	8	40	500	2	0.50	500	100	TO-92 TO-126 TO-126C SOT-223
MJE13002Q*	-	300	600	1.50	8	40	500	2	0.50	500	100	TO-92 TO-126 TO-126C SOT-223
MJE13002-E	-	300	600	1.50	8	40	500	2	0.80	500	100	TO-92 TO-126S
MJE13003	-	400	700	1.50	14	57	500	5	0.50	500	100	TO-92/NL TO-126 TO-126C TO-220 TO-251 TO-252
MJE13003-P	-	400	700	1.50	14	57	400	2	0.50	500	100	TO-92/NL TO-126 TO-126C TO-220 TO-251 TO-252
MJE13003-E	-	400	700	1.50	14	57	500	2	0.50	500	100	TO-92 TO-126
MJE13003D	-	400	700	1.50	14	57	500	5	0.50	500	100	TO-92/NL TO-126 TO-126C TO-220 TO-251 TO-252
MJE13003D-P	-	400	700	1.50	14	57	500	5	0.50	500	100	TO-92/NL TO-126 TO-126C TO-220 TO-251 TO-252
MJE13003-K*	-	400	700	1.50	14	57	500	5	0.50	500	100	TO-92 TO-92NL TO-126 TO-126C TO-251 TO-252
MJE13003-V	-	400	700	1.50	14	57	500	5	0.50	500	100	TO-92/NL TO-126/C TO-251/S TO-252 TO-220
MJE13003-R	-	400	700	1.50	14	57	500	5	0.50	500	100	TO-92/NL TO-126/C TO-251/S TO-252 TO-220
MJE13005	-	400	700	4.00	15	50	500	5	0.50	1000	200	TO-92/NL TO-126 TO-126C TO-220 TO-251 TO-252
MJE13005-K	-	400	700	4.00	15	50	500	5	0.50	1000	200	TO-220 TO-220F TO-251 TO-252
MJE13005D	-	400	700	4.00	15	50	500	5	0.50	1000	200	TO-126 TO-126C TO-263 TO-220 TO-220F
MJE13005D-K	-	400	700	4.00	15	50	500	5	0.50	1000	200	TO-251
MJE13007	-	400	700	8.00	8	40	2000	5	1.00	2000	400	TO-220 TO-220F TO-262 TO-220F1 TO-220F2
MJE13007-M	-	400	700	8.00	8	40	2000	5	1.00	2000	400	TO-220 TO-220F TO-262
MJE13007Q*	-	400	700	8.00	8	40	2000	5	1.00	2000	400	TO-220 TO-220F TO-262
MJE13007-K*	-	400	700	8.00	8	40	2000	5	1.00	2000	400	TO-220 TO-220F TO-262
MJE13007D	-	400	700	8.00	8	40	2000	5	1.00	2000	400	TO-220 TO-220F TO-262
MJE13009	-	400	700	12.00	-	40	5000	5	1.00	5000	1000	TO-220 TO-220F TO-3P
MJE13009Q*	-	400	700	12.00	-	40	5000	5	1.00	5000	1000	TO-220 TO-220F TO-3P
MJE13009D	-	400	700	12.00	-	40	5000	5	1.00	5000	1000	TO-220 TO-220F TO-3P
MJE13009-K	-	400	700	12.00	-	40	5000	5	1.00	5000	1000	TO-220 TO-220F TO-3P
MJE13009-P	-	400	700	12.00	-	40	5000	5	1.00	5000	1000	TO-220 TO-3P
MJE13011	-	400	450	10.00	10	-	4000	5	1.20	4000	800	TO-220 TO-220F TO-3P

PNP (-) 符號省略

# TRANSISTOR

## High Voltage Switching Transistor

Part No.		Maximum Ratings			Electrical Characteristics							Package
NPN	PNP	BV <sub>CEO</sub> (V)	BV <sub>CBO</sub> (V)	I <sub>c</sub> (A)	h <sub>FE</sub>				V <sub>CE(Sat)</sub> (V)			
					SPEC.		Conditions		SPEC.		Conditions	
					MIN.	MAX.	I <sub>c</sub> (mA)	V <sub>CE</sub> (V)	MAX.	I <sub>c</sub> (mA)	I <sub>B</sub> (mA)	
13002AG	-	400	700	0.75	7	20	400	5	0.50	200	40	TO-92
13002AH	-	450	700	0.50	25	35	100	5	0.40	200	40	TO-92 TO-126 TO-251
13003DW	-	200	350	2.00	15	30	500	5	1.00	1500	500	TO-92 TO-126 TO-251
13003DE	-	400	600	1.30	15	30	200	5	0.80	500	100	TO-92 TO-126
13003DF	-	400	600	1.50	15	30	200	5	0.90	1000	250	TO-92 TO-126
13003DH	-	400	600	1.80	15	30	200	5	0.80	1000	250	TO-92 TO-126 TO-251
13003ADG	-	400	700	1.50	5	30	1000	5	0.50	500	100	TO-92 TO-126 TO-251
13003CDH	-	400	900	1.50	5	30	1000	5	0.50	500	100	TO-92 TO-126 TO-251
13003ADA	-	450	700	1.50	8	40	200	10	0.80	500	100	TO-92 TO-126 TO-251
13003BDG	-	450	800	1.50	20	40	200	5	0.80	500	100	TO-92 TO-126 TO-251
13003BS	-	450	800	2.00	20	35	200	5	0.80	500	100	TO-92 TO-126 TO-251
13003EDA	-	500	850	1.30	23	35	200	5	0.80	500	100	TO-92 TO-126 TO-251
13005BA	-	400	800	3.00	8	40	2000	5	0.50	1000	200	TO-92
13005EC	-	400	850	4.00	8	40	2000	5	0.50	1000	200	TO-126 TO-251
ULB121	-	400	600	0.30	10	36	50	10	0.40	50	10	TO-251
ULB122	-	400	600	0.80	10	40	100	10	0.40	100	20	TO-251
ULB124	-	400	600	2.00	10	40	300	5	0.30	100	10	TO-251 TO-220 TO-126 TO-252
UBV45	-	400	700	0.75	12	27	200	5	1.00	300	75	TO-92
T2096	-	400	800	2.00	120	180	200	5	0.80	1000	200	TO-251 TO-252
5302	-	400	800	2.00	10	30	400	5	1.50	1000	250	TO-92 TO-126 TO-251 TO-252
5302D	-	400	800	2.00	10	40	400	5	1.50	1000	250	TO-92 TO-126 TO-251 TO-252
2SC5305	-	400	800	5.00	22	-	800	1	0.40	800	80	TO-220 TO-220F
2SC4242	-	400	450	7.00	10	-	4000	5	0.80	4000	800	TO-220 TO-220F
2SC2625	-	400	450	10.00	10	-	4000	5	1.20	4000	800	TO-3P TO-220
2SC3320	-	400	500	15.00	10	45	6000	5	1.00	6000	1200	TO-3P TO-220
TUL1102	-	450	1100	4.00	12	20	2000	5	1.50	2000	400	TO-252 TO-220 TO-220F1 TO-263
TUL1203	-	550	1400	5.00	9	28	2000	5	0.70	2000	400	TO-220
2SC5353	-	700	900	3.00	10	-	1	5	1.00	1200	240	TO-126 TO-126C TO-220 TO-220F TO-220F1
2SC5353B	-	750	900	3.00	10	-	1	5	1.00	1200	240	TO-126 TO-126C TO-220 TO-220F TO-220F1 TO-251
2SC5027E	-	700	750	3.00	10	40	200	5	2.00	1500	300	TO-126 TO-126C TO-220 TO-220F TO-220F1
2SC5027	-	800	850	3.00	10	40	200	5	2.00	1500	300	TO-220 TO-220F
BU208A	-	700	1500	8.00	8	-	1000	5	1.00	4500	2000	TO-3
BU508AFI	-	700	1500	8.00	6	30	100	5	1.00	4500	2000	TO-3P
UT2274	-	720	1400	1.00	15	35	100	5	1.50	250	50	TO-92 TO-251
UT2274B*	-	720	1400	1.00	15	35	100	5	1.50	250	50	TO-92 TO-251
2SC3149	-	800	1200	0.50	10	40	100	5	0.80	200	40	TO-126
C6084	-	800	1500	5.00	10	25	500	5	3.00	2700	540	TO-220 TO-220F TO-263

PNP (-) 符號省略

# TRANSISTOR

## Darlington Transistor

Part No.		Equivalent Circuit Diagram	Maximum Ratings			Electrical Characteristics								Package
NPN	PNP		BV <sub>CEO</sub> (V)	BV <sub>CBO</sub> (V)	I <sub>c</sub> (A)	h <sub>FE</sub>				V <sub>CE(Sat)</sub> (V)			f <sub>r</sub>	
						SPEC.		Conditions		SPEC.		Conditions	*Typical	
						MIN.	MAX.	I <sub>c</sub> (mA)	VCE (V)	MAX.	I <sub>c</sub> (mA)	I <sub>B</sub> (mA)	MIN. (MHz)	
MMBTA13	-		30	30	0.5	10000	-	100	5	1.50	100	0.1	125	SOT-23
MMBTA14	-		30	30	0.5	20000	-	100	5	1.50	100	0.1	125	SOT-23
MPSA13	-		30	30	0.5	10000	-	100	5	1.50	100	0.1	125	SOT-89 TO-92
MPSA14	-		30	30	0.5	20000	-	100	5	1.50	100	0.1	125	SOT-89 TO-92
MPSA113	-		30	30	0.5	30000	-	100	5	1.50	100	0.1	125	SOT-89 TO-92
PZTA14	-		30	30	0.5	20000	-	100	5	1.50	100	0.1	125	SOT-223
-	TIP110A		35	45	10.0	1000	60000	10000	2	2.00	10000	100.0	-	TO-220
2SD2686			60	50	1.0	2000	-	1000	2	1.50	1000	1.0	-	SOT-89
MPSA29	-		100	100	0.5	10000	-	100	5	1.50	100	0.1	125	TO-92
TIP112			100	100	2.0	1000	-	1000	4	2.50	2000	8.0	-	TO-220 TO-126
	TIP117*		100	100	2.0	1000	-	1000	4	2.50	2000	8.0	-	TO-220 TO-126
TIP122			100	100	5.0	1000	-	3000	3	2.00	3000	12.0	-	TO-220 TO-126
	TIP127		100	100	5.0	1000	-	3000	3	2.00	3000	12.0	-	TO-220 TO-126
TIP102			100	100	8.0	1000	20000	3000	4	2.00	3000	6.0	-	TO-252 TO-220
	TIP107		100	100	8.0	1000	20000	3000	4	2.00	3000	6.0	-	TO-252 TO-220
UD2195	-		120	130	4.0	1000	-	1000	4	2.00	2000	2.0	-	SOT-89
BTC1510F3	-		150	150	10.0	2000	20000	5000	3	1.50	5000	10.0	-	TO-263
BU931Z	-		350	-	10.0	300	-	5000	10	1.60	7000	70.0	-	TO-3P
BU941Z	-		350	-	15.0	300	-	5000	10	1.60	8000	100.0	-	TO-3P TO-220 TO-263
BU931	-		400	500	15.0	300	-	5000	10	1.60	7000	70.0	-	TO-3P TO-220 TO-263
BU941	-		400	500	15.0	300	-	5000	10	1.60	8000	100.0	-	TO-3P TO-220 TO-263
2SD1071			300	300	6.0	500	-	4000	2	1.50	4000	15.0	-	TO-220

PNP (-) 符號

# TRANSISTOR

## Dual Chip Transistor

Complex Bipolar Transistor  
SOT-26 Package

Part No.	Configuration	Equivalent Circuit Diagram	Maximum Ratings				Electrical Characteristics (T <sub>A</sub> =25°)										Type Part
			BV <sub>CBO</sub> *BV <sub>CES</sub> #BV <sub>CEV</sub> (V)	BV <sub>CEO</sub> *BV <sub>CES</sub> (V)	I <sub>c</sub> (mA)	P <sub>D</sub> T <sub>A</sub> =25° (W)	h <sub>FE</sub>		V <sub>CE(Sat)</sub> (V)			f <sub>T</sub>		Cob			
							SPEC.		Conditions		SPEC.	Conditions		*Typical	*Typical		
							MIN.	MAX.	I <sub>c</sub> (mA)	V <sub>CE</sub> (V)	MAX.	I <sub>c</sub> (mA)	I <sub>B</sub> (mA)	MIN. (MHz)	MAX. (pF)		
IMZ88	NPN+PNP		30	20	700	0.30	120	400	150	1	0.50	500	50.0	100	*9.0	8050S	
			-30	-20	-700		120	400	-150	-1	-0.50	-500	-50.0	100	*9.0	8550S	
IMZ2A	NPN+PNP		60	50	150	0.30	120	560	1	6	0.40	50	5.0	*180	3.5	-	
			-60	-50	-150		120	560	-1	-6	-0.50	-50	-5.0	*140	5.0	-	
IMX4*	NPNx2		30	18	50	0.30	27	270	10	10	0.50	20	4.0	600	1.6	-	
IMX2	NPNx2		60	50	150	0.30	120	560	1	6	0.40	50	5.0	*180	3.5	-	
IMX3*	NPNx2		60	50	150	0.30	120	560	1	6	0.40	50	5.0	*180	3.5	-	
IMX17*	NPNx2		60	50	500	0.30	120	390	100	3	0.60	500	50.0	*250	*7.0	-	
IMX8*	NPNx2		120	120	50	0.30	180	820	2	6	0.50	10	1.0	*140	-	-	
QS6Z5*	NPN+PNP		50	50	1000	0.30	180	450	50	2	0.35	500	25.0	*360	*7.0	-	
			-50	-50	-1000		180	450	-50	-2	-0.40	-500	-25.0	*400	*12.0	-	
IMT2A	PNPx2		-60	-50	-150	0.30	120	560	-1	-6	-0.50	-50	-5.0	*140	5.0	-	
IMT3A*	PNPx2		-60	-50	-150	0.30	120	560	-1	-6	-0.50	-50	-5.0	*140	5.0	-	
IMT17*	PNPx2		-60	-50	-500	0.30	120	390	-100	-3	-0.60	-500	-50.0	*200	*7.0	-	

## SOT-363 Package

Part No.	Configuration	Equivalent Circuit Diagram	Maximum Ratings				Electrical Characteristics (T <sub>A</sub> =25°)										Type Part
			BV <sub>CBO</sub> *BV <sub>CES</sub> #BV <sub>CEV</sub> (V)	BV <sub>CEO</sub> *BV <sub>CES</sub> (V)	I <sub>c</sub> (mA)	P <sub>D</sub> T <sub>A</sub> =25° (W)	h <sub>FE</sub>		V <sub>CE(Sat)</sub> (V)			f <sub>T</sub>		Cob			
							SPEC.		Conditions		SPEC.	Conditions		*Typical	*Typical		
							MIN.	MAX.	I <sub>c</sub> (mA)	V <sub>CE</sub> (V)	MAX.	I <sub>c</sub> (mA)	I <sub>B</sub> (mA)	MIN. (MHz)	MAX. (pF)		
UMT18N*	PNPx2		-15	-12	-500	0.20	270	680	-10	-2	-0.25	-200	-10.0	*260	*6.5	2SA2018x2	
UMT1N	PNPx2		-60	-50	150	0.15	120	560	-1	-6	-0.50	-50	-5.0	*140	5.0	-	
MMDT8050S*	NPNx2		30	20	700	0.20	100	400	1	1	0.50	500	50.0	100	*9.0	8050Sx2	
MMDT8150*	NPNx2		40	32	800	0.20	180	560	100	1	0.30	400	20.0	*150	*15.0	-	
MMDT3906	PNPx2		-40	-40	-200	0.20	100	300	-10	-1	-0.40	-50	-5.0	250	4.5	MMBT3906x2	
MMDT4403*	PNPx2		-40	-40	-600	0.20	100	300	-150	-2	-0.40	-150	-15.0	200	8.5	MMBT4403x2	


# TRANSISTOR

SOT-363 Package



Part No.	Configuration	Equivalent Circuit Diagram	Maximum Ratings				Electrical Characteristics (T <sub>A</sub> =25°)										Type Part
			BV <sub>CBO</sub> *BV <sub>CES</sub> #BV <sub>CEV</sub> (V)	BV <sub>CEO</sub> *BV <sub>VES</sub> (V)	I <sub>C</sub> (mA)	P <sub>D</sub> T <sub>A</sub> =25° (W)	h <sub>FE</sub>		V <sub>CE(Sat)</sub> (V)			f <sub>T</sub>		C <sub>ob</sub>			
							SPEC.		Conditions		SPEC.	Conditions		*Typical	*Typical		
							MIN.	MAX.	I <sub>C</sub> (mA)	V <sub>CE</sub> (V)	MAX.	I <sub>C</sub> (mA)	I <sub>B</sub> (mA)	MIN. (MHz)	MAX. (pF)		
MMDT4413*	NPN+PNP		60	40	600	0.20	100	300	150	1	0.40	150	15.0	250	6.5	MMBT4401	
			-40	-40	-600		100	300	-150	-2	-0.40	-150	-15.0	200	8.5	MMBT4403	
MMDT3946	NPN+PNP		60	40	200	0.20	100	300	10	1	0.30	50	5.0	300	4.0	MMBT3904	
			-40	-40	-200		100	300	-10	-1	-0.40	-50	-5.0	250	4.5	MMBT3906	
MMDT2227	NPN+PNP		75	40	600.0	0.20	100	300	150	10	0.30	150	15.0	300	8	MMBT2222A	
			-60	-60	-600.0		100	300	-150	-10	-0.40	-150	-15.0	200	8	MMBT2907A	
MMDT3904	NPNx2		60	40	200	0.20	100	300	10	1	0.30	50	5.0	300	4.0	MMBT3904x2	
MMDT2907A	NPN+PNP		60	30	500.0	0.30	30	-	300	10	0.40	150	15.0	250	4	-	
			-60	-30	-500.0		30	-	-300	-10	-0.40	-150	-15.0	250	4	-	
MMDT2222A	NPNx2		75	40	600	0.20	100	300	150	10	0.30	150	15.0	300	8.0	MMBT2222Ax2	
MMDT5401	PNPx2		-160	-150	-600	0.20	80	400	-10	-5	-0.50	-50	-5.0	100	6.0	MMBT5401x2	
MMDT5451*	NPN+PNP		180	160	600	0.20	80	400	10	5	0.20	50	5.0	100	6.0	MMBT5551	
			-160	-150	-600		80	400	-10	-5	-0.50	-50	-5.0	100	6.0	MMBT5401	
MMDT5551	NPNx2		180	160	600	0.20	80	400	10	5	0.20	50	5.0	100	6.0	MMBT5551x2	
PUMX1	NPNx2		50	40	100	0.20	120	-	1	6	0.20	50	5.0	100	-	-	
PUMT1	PNPx2		-50	-40	-100	0.20	120	-	-1	-6	-0.20	-50	-5.0	100	-	-	
UT3PP	PNP+PNP+ Resistor		-50	-50	-100	0.125	100	-	-1	-5	-0.30	-10	-0.5	*150	-	-	
PUMZ1	NPN+PNP		50	40	100	0.20	120	-	1	6	0.20	50	5.0	100	-	-	
			-50	-40	-100				-1	-6	-0.20	-50	-5.0				
UMZ1N	NPN+PNP		60	50	150	0.15	120	560	1	6	0.40	50	5.0	*180	3.5	-	
			-60	-50	-150				-1	-6	-0.50	-50	-5.0	*140	5.0	-	
BC847BS	NPNx2		50	45	100	0.20	200	450	2	5	0.25	10	0.5	100	4.5	BC847Bx2	
BC857BS*	PNPx2		-50	-45	-100	0.20	200	450	-2	-5	-0.30	-10	-0.5	100	6.0	BC857Bx2	
BC847PN*	NPN+PNP		50	45	100	0.20	200	450	2	5	0.25	10	0.5	100	6.0	BC847B	
			-50	-45	-100		200	450	-2	-5	-0.30	-10	-0.5	100	6.0	BC857B	
BC846AS*	NPNx2		80	65	100	0.20	110	220	2	5	0.25	10	0.5	100	-	-	
BC856AS	PNPx2		-80	-65	-100	0.20	125	250	-2	-5	-0.30	-10	-0.5	100	-	-	

# TRANSISTOR

## SOT-553 Package

Part No.	Configuration	Equivalent Circuit Diagram	Maximum Ratings				Electrical Characteristics (T <sub>A</sub> =25°)									Type Part
			BV <sub>CBO</sub> *BV <sub>CES</sub> #BV <sub>CEV</sub> (V)	BV <sub>CEO</sub> *BV <sub>CES</sub> (V)	I <sub>c</sub> (mA)	P <sub>D</sub> T <sub>A</sub> =25° (W)	h <sub>FE</sub>		V <sub>CE(Sat)</sub> (V)			f <sub>T</sub>		Cob		
							SPEC.		Conditions		SPEC.	Conditions		*Typical	*Typical	
							MIN.	MAX.	I <sub>c</sub> (mA)	V <sub>CE</sub> (V)	MAX.	I <sub>c</sub> (mA)	I <sub>b</sub> (mA)	MIN. (MHz)	MAX. (pF)	
EMY1*	PNP+NPN		-60	-50	-150	0.15	120	560	-1	-6	-0.50	-50	-5.0	*140	5.0	-
			60	50	150		120	560	1	6	0.40	50	5.0	*180	3.5	-





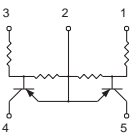
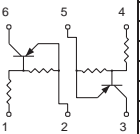
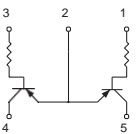
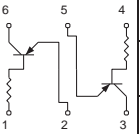
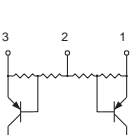
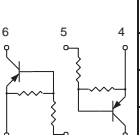
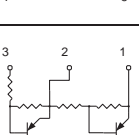
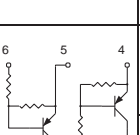
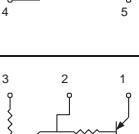
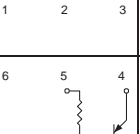
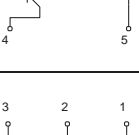
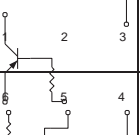
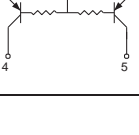
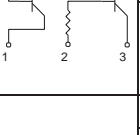
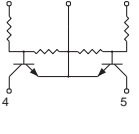
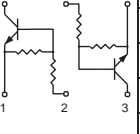
## DFN2X2-6L Package

Part No.	Configuration	Equivalent Circuit Diagram	Maximum Ratings				Electrical Characteristics (T <sub>A</sub> =25°)									Type Part
			BV <sub>CBO</sub> *BV <sub>CES</sub> #BV <sub>CEV</sub> (V)	BV <sub>CEO</sub> *BV <sub>CES</sub> (V)	I <sub>c</sub> (mA)	P <sub>D</sub> T <sub>A</sub> =25° (W)	h <sub>FE</sub>		V <sub>CE(Sat)</sub> (V)			f <sub>T</sub>		Cob		
							SPEC.		Conditions		SPEC.	Conditions		*Typical	*Typical	
							MIN.	MAX.	I <sub>c</sub> (mA)	V <sub>CE</sub> (V)	MAX.	I <sub>c</sub> (mA)	I <sub>b</sub> (mA)	MIN. (MHz)	MAX. (pF)	
US6X8*	NPNx2		30	30	1000	0.40	270	680	100	2	0.35	500	25.0	*320	*7.0	-
US6X7*	NPNx2		15	12	1500	0.40	270	680	200	2	0.20	500	25.0	*400	*12.0	-

# TRANSISTOR

## DUAL CHIP

### Complex Digital Transistor

Equivalent Circuit Diagram	Package		Equivalent Circuit Diagram	Package		Configuration	Application	Equivalent Part No.			
	SOT-353	SOT-25		SOT-363	SOT-26						
											
Part No.		Part No.									
	UA1J	UA1G		UA1K	UA1H	PNP*2	Potential divider type	DTA124E*2			
	UA2J	UA2G		UA2K	UA2H		Leak absorption type	DTA144E*2			
	UA5J	UA5G		UA5K	UA5H		Potential divider type	DTA123J*2			
	UA7J	UA7G		UA7K	UA7H		Leak absorption type	DTA143X*2			
	UA8J	UA8G		UA8K	UA8H		Potential divider type	DTA114Y*2			
	UA9J	UA9G		UA9K	UA9H		Leak absorption type	DTA114E*2			
	UA10J	UA10G		UA10K	UA10H		Potential divider type	DTA113Z*2			
	UA11J	UA11G		UA11K	UA11H		Leak absorption type	DTA143Z*2			
		UA3J		UA3G			UA3K	UA3H	PNP*2	Input resistor type	DTA143T*2
		UA4J		UA4G			UA4K	UA4H			DTA114T*2
		UA6J		-			UA6K	-			DTA144T*2
	UB1J	UB1G		UB1K	UB1H	PNP*2	Potential divider type	DTA124E*2			
	UB2J	UB2G		UB2K	UB2H		Leak absorption type	DTA144E*2			
	UB9J	UB9G		UB9K	UB9H		Potential divider type	DTA114Y*2			
	UB10J	UB10G		UB10K	UB10H		Leak absorption type	DTA123J*2			
	UB11J	UB11G		UB11K	UB11H		Potential divider type	DTA114E*2			
	-	UB5G		-	UB5H	PNP*2	Potential divider type	DTA124E*2			
	UB6J	-		UB6K	-		DTA144E*2				
	UB3J	UB3G		UB3K	UB3H	PNP*2	Input resistor type	DTA143T*2			
	UB4J	UB4G		UB4K	UB4H			DTA114T*2			
	-	UB7G		-	UB7H	PNP*2	Input resistor type	DTA143T*2			
	UB8J	-		UB8K	-			DTA114T*2			
	UG1J	UG1G		UG1K	UG1H	NPN*2	Potential divider type	DTC124E*2			
	UG2J	UG2G		UG2K	UG2H		Leak absorption type	DTC144E*2			
	UG5J	UG5G		UG5K	UG5H		Potential divider type	DTC114Y*2			
	UG8J	UG8G		UG8K	UG8H		Leak absorption type	DTC143Z*2			
	UG9J	UG9G		UG9K	UG9H		Potential divider type	DTC114E*2			
	UG11J	UG11G		UG11K	UG11H		Leak absorption type	DTC123J*2			
	UG3J	UG3G		UG3K	UG3H	NPN*2	Input resistor type	DTC143T*2			
	UG4J	UG4G		UG4K	UG4H			DTC114T*2			
	UG6J	UG6G		UG6K	UG6H			DTC144T*2			

# TRANSISTOR

Equivalent Circuit Diagram	Package		Equivalent Circuit Diagram	Package		Configuration	Application	Equivalent Part No.
	SOT-353	SOT-25		SOT-363	SOT-26			
	Part No.			Part No.				
	UH1J	UH1G		UH1K	UH1H	NPN*2	Potential divider type	DTC124E*2
	UH2J	UH2G		UH2K	UH2H			DTC144E*2
	UH11J	UH11G		UH11K	UH11H		DTC114E*2	
	UH9J	UH9G		UH9K	UH9H		Leak absorption type	DTC114Y*2
	UH10J	UH10G		UH10K	UH10H			DTC123J*2
	UH5J	UH5G		UH5K	UH5H		Potential divider type	DTC124E*2
	UH6J	UH6G		UH6K	UH6H			DTC144E*2
	UH3J	UH3G		UH3K	UH3H		Input resistor type	DTC143T*2
	UH4J	UH4G		UH4K	UH4H			DTC114T*2
	-	UH15G		-	UH15H			DTC144T*2
	UH7J	-		UH7K	-	Input resistor type	DTC143T*2	
	UH8J	UH8G		UH8K	UH8H		DTC114T*2	
	UH14J	UH14G		UH14K	UH14H		DTC144T*2	
	UD2J	UD2G		UD2K	UD2H	PNP+NPN	Potential divider type	DTA124E+DTC124E
	UD3J	UD3G		UD3K	UD3H			DTA114E+DTC114E
	UD5J	-		UD5K	-		Leak absorption type	DTA143X+DTC144E
	UD9J	UD9G		UD9K	UD9H			DTA114Y+DTC114Y
	UD12J	-		UD12K	-		Potential divider type	DTA144E+DTC144E
	-	UD1G		-	UD1H		Input resistor type	DTA124T+DTC124T
	UD6J	UD6G		UD6K	UD6H			DTA143T+DTC143T
	-	UD8G		-	UD8H			DTA144T+DTC144T
	-	UD10G		-	UD10H		Power management	DTC114T
	-	UD16G		-	UD16H			DTB123E+DTC115T
	UD22J	-		UD22K	-	DTA143Z+DTC143Z		
	-	-		-	DBC2315	Power management	DTB123Y+DTC115T	
	-	-		-	-		-	
	-	-		-	-		-	



# TRANSISTOR

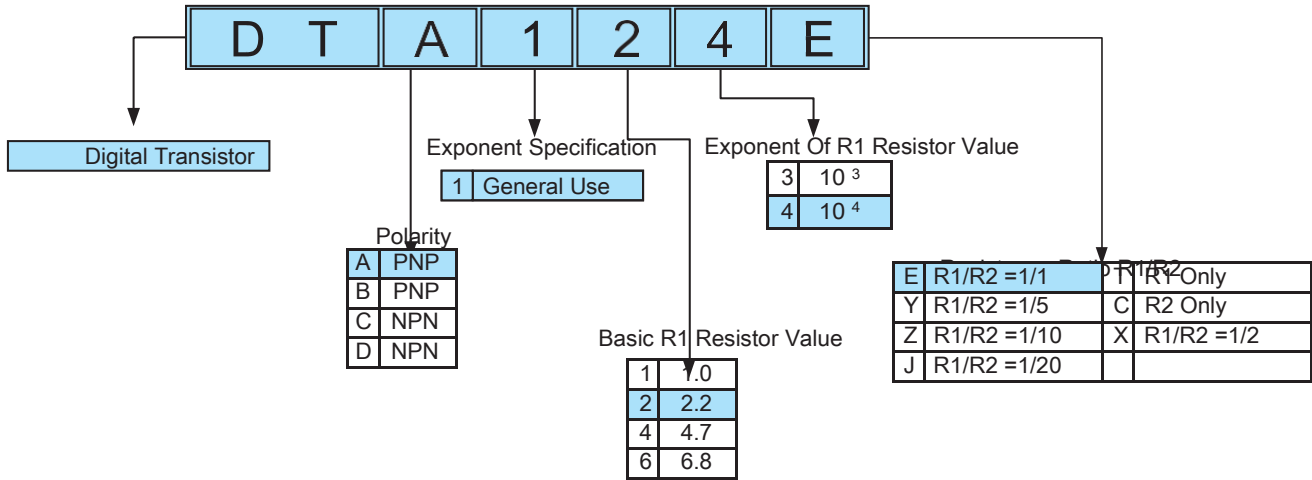
## Built-In Bias Resistor Transistor

PNP	NPN	Maximum Ratings		Electrical Characteristics (T <sub>A</sub> =25℃)							Package
				G <sub>I</sub> (h <sub>FE</sub> )				Resistor		f <sub>T</sub>	
				Specification		Conditions		Typical		Typical	
				MIN.	MAX.	I <sub>O</sub> (mA)	V <sub>O</sub> (V)	R1 (K $\Omega$ )	R2 (K $\Omega$ )	MIN. (MHz)	
		V <sub>CC</sub>	I <sub>O(MAX.)</sub>	Specification		Conditions		Resistor		f <sub>T</sub>	
V <sub>CEO</sub>	I <sub>C(MAX.)</sub>	MIN.	MAX.	I <sub>O</sub>	V <sub>O</sub>	R1	R2	MIN.			
(V)	(mA)			(mA)	(V)	(K $\Omega$ )	(K $\Omega$ )	(MHz)			
DTA123E	DTC123E	50	100	20	-	20	5	2.2	2.2	250	SOT-23 SOT-323 SOT-523 TO-92
DTA143E	DTC143E	50	100	20	-	10	5	4.7	4.7	250	SOT-23 SOT-323 SOT-523 TO-92
DTA114E	DTC114E	50	100	30	-	5	5	10.0	10.0	250	TO-92 TO-92SP SOT-23 SOT-323 SOT-523
DTA124E	DTC124E	50	100	56	-	5	5	22.0	22.0	250	SOT-23 SOT-323 SOT-523
DTA144E	DTC144E	50	100	68	-	5	5	47.0	47.0	250	SOT-23 SOT-323 SOT-523
DTA115E	DTC115E	50	100	82	-	5	5	100.0	100.0	250	SOT-23 SOT-323 SOT-523
DTB123E*	DTD123E*	50	500	39	-	50	5	2.2	2.2	*200	SOT-23 SOT-323
DTB143E	DTD143E	50	500	47	-	50	5	4.7	4.7	200	TO-92 SOT-23 SOT-323
DTB114E	DTD114E	50	500	56	-	50	5	10.0	10.0	200	SOT-23 SOT-323
DTA123Y	DTC123Y	50	100	33	-	10	5	2.2	10.0	250	SOT-23 SOT-323 SOT-523
DTA123J	DTC123J	50	100	80	-	10	5	2.2	47.0	250	TO-92 TO-92SP SOT-23 SOT-323 SOT-523
DTA143X	DTC143X	50	100	30	-	10	5	4.7	10.0	250	TO-92 TO-92SP SOT-23 SOT-323 SOT-523
DTA143Z	DTC143Z	50	100	80	-	10	5	4.7	47.0	250	SOT-23 SOT-323 SOT-523 TO-92 TO-92SP
DTA114W	DTC114W*	50	100	24	-	10	5	10.0	4.7	250	SOT-23 SOT-323
DTA114Y	DTC114Y	50	100	68	-	5	5	10.0	47.0	250	SOT-23 SOT-323 SOT-523 TO-92
DTA124X*	DTC124X*	50	100	68	-	5	5	22.0	47.0	250	SOT-23 SOT-323
DTA144V*	DTC144V*	50	100	33	-	5	5	47.0	10.0	250	SOT-23 SOT-323
DTA144W*	DTC144W*	50	100	56	-	5	5	47.0	22.0	250	SOT-23 SOT-323
DTB113Z	DTD113Z	50	500	56/82	-	50	5	1.0	10.0	200	SOT-23 SOT-323 TO-92
DTB123Y	DTD123Y	50	500	56	-	50	5	2.2	10.0	200	TO-92 SOT-23 SOT-323
-	DTC123TKA*	50	100	100	600	50	5	2.2	None	250	SOT-23 SOT-323
DTA143T	DTC143T	50	100	100	600	1	5	4.7	None	250	SOT-23 SOT-323 SOT-523 TO-92SP
DTA114T	DTC114T	50	100	100	600	1	5	10.0	None	250	SOT-23 SOT-323 SOT-523
DTA124T	DTC124T	50	100	100	600	1	5	22.0	None	250	SOT-23
DTA144T	DTC144T	50	100	100	600	1	5	47.0	None	250	SOT-23 SOT-323 SOT-523
DTA115T	DTC115T	50	100	100	600	1	5	100.0	None	250	SOT-23
DTA125T	DTC125T	50	100	100	600	1	5	200.0	None	250	SOT-23 SOT-323
DTA113T	DTC113T	50	200	100	-	1	5	1.0	None	1	SOT-23 SOT-323 SOT-523
DTB114T*	-	40	500	100	600	50	5	2.2	None	200	SOT-23
DTB123T*	DTD123T*	40	500	100	600	50	5	4.7	None	200	SOT-23
DTB143T*	DTD143T*	40	500	100	600	50	5	10.0	None	200	SOT-23
DTA114G*	DTC114G*	50	100	30	-	5	5	None	10.0	200	SOT-23
DTA124G*	DTC124G*	50	100	68	-	5	5	None	22.0	200	SOT-23
DTA144G*	DTC144G*	50	100	68	-	5	5	None	47.0	200	SOT-23
DTA115G*	DTC115G*	50	100	68	-	5	5	None	100.0	200	SOT-23
DTB114G*	DTD114G*	40	500	56	-	5	5	None	10.0	200	SOT-23

PNP (-) 符號省略

# TRANSISTOR

## Digital Transistors Designation System



# TRANSISTOR

## Complex Bipolar DTR + MOSFET

### SOT-363 Package

Part No.	Configuration	Equivalent Circuit Diagram	TYPE	Maximum Ratings				Electrical Characteristics (T <sub>A</sub> =25 °C)						Type Part	
								MIN.		MAX.		Conditions			MAX.
				Digital TR	BV <sub>CB0</sub> (V)	BV <sub>CEO</sub> (V)	I <sub>C</sub> (A)	P <sub>D</sub> (W)	h <sub>FE</sub>	I <sub>C</sub> (mA)	V <sub>CE</sub> (V)	V <sub>CE(Sat)</sub> (V)	I <sub>C</sub> (mA)		I <sub>B</sub> (mA)
UMF32N*	PNP+N-ch		Bipolar DTR	-50	-50	-0.10	0.15	100.0	600.0	-1.0	-5.0	-0.30	-5.0	-0.25	DTA143T
			MOSFET	V <sub>DSS</sub> (V)	V <sub>GSS</sub> (V)	I <sub>D</sub> (A)		TA=25 °C?	V <sub>GS(th)</sub> (V)	I <sub>D</sub> (uA)	V <sub>DS</sub> (V)	R <sub>DS(on)</sub> (°C)	I <sub>D</sub> (mA)	V <sub>GS</sub> (V)	2SK3019

## Complex Bipolar TR + MOSFET

### SOT-363 Package

Part No.	Configuration	Equivalent Circuit Diagram	TYPE	Maximum Ratings				Electrical Characteristics (T <sub>A</sub> =25 °C)						Type Part	
								MIN.		MAX.		Conditions			MAX.
				Digital TR	BV <sub>CB0</sub> (V)	BV <sub>CEO</sub> (V)	I <sub>C</sub> (A)	P <sub>D</sub> (W)	h <sub>FE</sub>	I <sub>C</sub> (mA)	V <sub>CE</sub> (V)	V <sub>CE(Sat)</sub> (V)	I <sub>C</sub> (mA)		I <sub>B</sub> (mA)
UMF6N*	PNP+N-ch		Bipolar TR	-15	-12	-0.50	0.15	270.0	680.0	-10.0	-2.0	-0.25	-200.0	-10.00	2SA2018
			MOSFET	V <sub>DSS</sub> (V)	V <sub>GSS</sub> (V)	I <sub>D</sub> (A)		TA=25 °C?	V <sub>GS(th)</sub> (V)	I <sub>D</sub> (uA)	V <sub>DS</sub> (V)	R <sub>DS(on)</sub> (°C)	I <sub>D</sub> (mA)	V <sub>GS</sub> (V)	2SK3019
UMF9N*	NPN+N-ch		Bipolar TR	15	12	0.50	0.15	270.0	680.0	10.0	2.0	0.25	200.0	10.00	2SC5585
			MOSFET	V <sub>DSS</sub> (V)	V <sub>GSS</sub> (V)	I <sub>D</sub> (A)		TA=25 °C?	V <sub>GS(th)</sub> (V)	I <sub>D</sub> (uA)	V <sub>DS</sub> (V)	R <sub>DS(on)</sub> (°C)	I <sub>D</sub> (mA)	V <sub>GS</sub> (V)	2SK3019

## Complex Bipolar TR + Diode

### SOT-353 Package

Part No.	Configuration	Equivalent Circuit Diagram	TYPE	Maximum Ratings				Electrical Characteristics (T <sub>A</sub> =25 °C)						Type Part	
								MIN.		MAX.		Conditions			MAX.
				Digital TR	BV <sub>CB0</sub> (V)	BV <sub>CEO</sub> (V)	I <sub>C</sub> (A)	P <sub>D</sub> (W)	h <sub>FE</sub>	I <sub>C</sub> (mA)	V <sub>CE</sub> (V)	V <sub>CE(Sat)</sub> (V)	I <sub>C</sub> (mA)		I <sub>B</sub> (mA)
UML1N*	PNP+Diode		Bipolar TR	-60	-50	-0.15	0.15	120.0	560.0	-1.0	-6.0	-0.50	-50.0	-5.00	2SA1037AK
			Diode	V <sub>RM</sub> (V)	V <sub>R</sub> (V)	I <sub>O</sub> (A)		TA=25 °C?	C <sub>T</sub> (pF)	f=1 MHz	V <sub>R</sub> (V)	V <sub>F</sub> (V)	I <sub>F</sub> (mA)	-	-
UML4N*	PNP+Diode		Bipolar TR	-15	-12	-0.50	0.15	270.0	680.0	-10.0	-2.0	0.25	-200.0	-10.00	2SA2018
			Diode	V <sub>RM</sub> (V)	V <sub>R</sub> (V)	I <sub>O</sub> (A)		TA=25 °C?	C <sub>T</sub> (pF)	f=1 MHz	V <sub>R</sub> (V)	V <sub>F</sub> (V)	I <sub>F</sub> (mA)	-	RB521S-30
UML2N*	NPN+Diode		Bipolar TR	60	50	0.15	0.15	120.0	560.0	1.0	6.0	0.40	50.0	5.00	2SC2412K
			Diode	V <sub>RM</sub> (V)	V <sub>R</sub> (V)	I <sub>O</sub> (A)		TA=25 °C?	C <sub>T</sub> (pF)	f=1 MHz	V <sub>R</sub> (V)	V <sub>F</sub> (V)	I <sub>F</sub> (mA)	-	-
UML6N*	NPN+Diode		Bipolar TR	15	12	0.50	0.15	270.0	680.0	10.0	2.0	0.25	200.0	10.00	2SC5585
			Diode	V <sub>RM</sub> (V)	V <sub>R</sub> (V)	I <sub>O</sub> (A)		TA=25 °C?	C <sub>T</sub> (pF)	f=1 MHz	V <sub>R</sub> (V)	V <sub>F</sub> (V)	I <sub>F</sub> (mA)	-	RB521S-30

## JFET

### JFET for Condenser MIC

Part No.	Maximum Ratings				Electrical Characteristics (T <sub>A</sub> =25°C)										Package
	V <sub>GDO</sub> (V)	I <sub>G</sub> (mA)	I <sub>D</sub> (mA)	P <sub>D</sub> (mW)	Y <sub>FS</sub>		I <sub>DSS</sub>				V <sub>GS(off)</sub>				
					SPEC.		SPEC. (*TYP)		Conditions		SPEC. (*TYP)		Conditions		
					MIN. (mS)	Typ. (mS)	MIN. ( $\mu$ A)	MAX. ( $\mu$ A)	V <sub>DS</sub> (V)	V <sub>GS</sub> (V)	MIN. (V)	MAX. (V)	V <sub>DS</sub> (V)	I <sub>D</sub> ( $\mu$ A)	
K596	-20	10	1.0	100	0.40	1.2	100	800	5	0	*-0.6	-1.5	5	1	TO-92SP
K1109	-20	10	10.0	80	0.60	1.6	40	600	2	0	-0.1	-1.0	5	1	SOT-23 SOT-323
TF202	-20	10	10.0	100	-	1.43	100	350	2	0	-	-0.38	2	1	SOT-113 SOT-523
TF212	-20	10	1.0	100	1.00	1.2	140	350	5	0	-0.2	-1.2	5	1	SOT-113S SOT-523
TF215	-20	10	1.0	100	0.80	1.2	140	350	5	0	-0.2	-1.0	5	1	SOT-523
TF218	-20	10	1.0	100	0.65	1.0	140	350	5	0	-0.2	-1.0	5	1	SOT-523
TF2123	-20	10	10.0	100	-	1.43	100	350	2	0	-	-0.4	2	1	SOT-23 SOT-523 SOT-723

### JFET for General purpose Application

Part No.	Maximum Ratings				Electrical Characteristics (T <sub>A</sub> =25°C)										Package
	V <sub>GDS</sub> (V)	I <sub>G</sub> (mA)	I <sub>D</sub> (mA)	P <sub>D</sub> (mW)	Y <sub>FS</sub>		I <sub>DSS</sub>				V <sub>GS(off)</sub>				
					SPEC.		SPEC. (*TYP)		Conditions		SPEC. (*TYP)		Conditions		
					MIN. (mS)	Typ. (mS)	MIN. ( $\mu$ A)	MAX. ( $\mu$ A)	V <sub>DS</sub> (V)	V <sub>GS</sub> (V)	MIN. (V)	MAX. (V)	V <sub>DS</sub> (V)	I <sub>D</sub> ( $\mu$ A)	
K4059	-20	10	0.5	100	1.35	1.85	140	500	2	0	-0.1	-1	2	1	SOT-723
2SK508	-15	5	50	200	14	19	10000	50000	5	0	-0.6	-3.5	5	10	SC-59
2SK303	-30	10	20	200	2.5	6.0	600	12000	10	0	*-1.0	-4.0	10	1	SOT-23 TO-92
2SK2751	-40	2	10	200	2.5	-	1400	4700	10	0	-	-	-	-	SOT-23 SOT-323
2SK545	-40	10	1	125	0.05	0.13	30	300	10	0	*-1.5	-4	10	1	SOT-23
UJ0100	-30	10	20	200	2.5	6	600	2500	10	0	*-1.0	-4.0	10	1	SOT-23

# MOSFET

## Combo Power MOSFET

### 12V Trench Combo Power MOSFET

Part No.	Configuration	Equivalent Circuit Diagram	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
			V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	2.5V		1.8V		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
			(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.							
QS8J11*	Dual P		-12	0 to -8	-3.50	41.0	57.0	55.0	82.0	-0.3	-1.0	30.0	60.0	-1.2	-3.5	DFN3X3-8L
QS8J2*	Dual P		-12	±10	-4.00	36.0	50.0	46.0	69.0	-0.3	-1.0	60.0	180.0	-1.2	-4.0	DFN3X3-8L

### 20V Trench Combo Power MOSFET

Part No.	Configuration	Equivalent Circuit Diagram	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
			V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	4.5V		2.5V		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
			(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.							
UD4P20	Dual P		-20	±16	-4.00	85.0	100.0	-	-	-1.0	-2.5	35.0	35.0	-1.2	-4.0	SOP-8
UD9926	Dual N		20	±10	6.00	28.0	32.0	38.0	45.0	0.5	1.5	15.0	25.0	1.3	1.7	SOP-8
UD9926	Dual N		20	±10	6.00	28.0	32.0	38.0	45.0	0.5	1.5	15.0	25.0	1.3	1.7	TSSOP-8
UT6898	Dual N		20	±12	9.40	10.0	14.0	13.0	18.0	0.5	1.5	15.0	16.0	1.3	1.3	SOP-8
UTT30NP30	N		20	±8	30.00	-	*15.0 18.0	-	-	0.5	1.2	57.0	234.0	1.3	30.0	TO-252-4
	P		-25	±20	-30.00	-	*25.0 34.0	-	-	-1.0	-3.0	42.0	173.0	-1.2	-30.0	

### 30V Trench Combo Power MOSFET

Part No.	Configuration	Equivalent Circuit Diagram	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
			V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	10V		4.5V/4.0V		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
			(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.							
UK3018BW	Dual N		30	±20	0.10	-	-	5000	8000	0.8	1.5	35.0	80.0	-	-	SOT-3. 3
UM6K1N	Dual N		30	±20	0.10	-	-	*5000	*8000	0.8	1.5	35.0	80.0	-	-	SOT-363
UM6J1N*	Dual P		-30	±20	-0.20	900	1400	1400 *1600	2100 *2400	-1.0	-2.5	5.0	40.0	-1.2	-0.1	SOT-363
QS8K2*	Dual N		30	±20	3.50	-	-	38.0 *40.0	54.0 *56.0	0.5	1.5	12.0	13.0	1.2	3.5	DFN3X3-8L
QS8K11*	Dual N		30	±20	3.50	35.0	50.0	45.0 *50.0	65.0 *70.0	1.0	2.5	25.0	7.0	1.2	3.5	DFN3X3-8L
QS8M11	N		30	±20	3.50	35.0	50.0	45.0 *50.0	65.0 *70.0	1.0	2.5	25.0	7.0	1.2	3.5	DFN3X3-8L SOP-8
	P		-30	±20	-3.00	55.0	75.0	85.0 *95.0	115.0 *125.0	-1.0	-2.5	18.0	35.0	-1.2	-3.0	
QS8K12*	Dual N		30	±20	4.00	30.0	42.0	40.0 *45.0	56.0 *63.0	1.0	2.5	30.0	5.0	1.2	4.0	DFN3X3-8L
QS8M12*	N		30	±20	4.00	30.0	42.0	40.0 *45.0	56.0 *63.0	1.0	2.5	30.0	5.0	1.2	4.0	DFN3X3-8L
	P		-30	±20	-4.00	40.0	56.0	55.0 *60.0	77.0 *84.0	-1.0	-2.5	20.0	50.0	-1.2	-4.0	
UTM4953	Dual P		-30	±25	-4.90	53.0	60.0	80.0	95.0	-1.0	-2.0	15.0	15.0	-1.3	-1.7	SOP-8
QS8J5*	Dual P		-30	±20	-5.00	28.0	39.0	40.0 *45.0	56.0 *63.0	-1.0	-2.5	40.0	55.0	-1.2	-5.0	DFN3X3-8L

# MOSFET

## 30V Trench Combo Power MOSFET

Part No.	Configuration	Equivalent Circuit Diagram	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
			V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	10V		4.5V/4.0V		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
			(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.			TYP.	TYP.	MAX.	Conditions	
QS8M13*	N		30	±20	6.00	20.0	28.0	25.0 *28.0	35.0 *39.0	1.0	2.5	40.0	7.0	1.2	6.0	DFN3X3-8L
	P		-30	±20	-5.00	28.0	39.0	40.0 *45.0	56.0 *63.0	-1.0	-2.5	40.0	55.0	-1.2	-5.0	
SH8K11*	Dual N		30	±20	3.50	70.0	98.0	90.0 *100.0	126.0 *140.0	1.0	2.5	8.0	3.0	1.2	3.5	SOP-8
SH8M11*	N		30	±20	3.50	70.0	98.0	90.0 *100.0	126.0 *140.0	1.0	2.5	8.0	3.0	1.2	3.5	SOP-8
	P		-30	±20	-3.50	70.0	98.0	100.0 *110.0	140.0 *155.0	-1.0	-2.5	18.0	12.0	-1.2	-3.5	
SH8J62*	Dual P		-30	±20	-4.50	40.0	56.0	55.0 *60.0	77.0 *84.0	-1.0	-2.5	15.0	50.0	-1.2	-4.5	SOP-8
SH8K12*	Dual N		30	±20	5.00	30.0	42.0	40.0 *45.0	56.0 *63.0	1.0	2.5	27.0	5.0	1.2	5.0	SOP-8
SH8M12*	N		30	±20	5.00	30.0	42.0	40.0 *45.0	56.0 *63.0	1.0	2.5	27.0	5.0	1.2	5.0	SOP-8
	P		-30	±20	-4.50	40.0	56.0	55.0 *60.0	77.0 *84.0	-1.0	-2.5	15.0	50.0	-1.2	-4.5	
SH8K13*	Dual N		30	±20	6.00	22.0	31.0	30.0 *35.0	42.0 *49.0	1.0	2.5	16.0	7.0	1.2	6.0	SOP-8
SH8M13*	N		30	±20	6.00	22.0	31.0	30.0 *35.0	42.0 *49.0	1.0	2.5	16.0	7.0	1.2	6.0	SOP-8
	P		-30	±20	-7.00	21.5	29.0	29.0 *31.0	39.0 *40.8	-1.0	-2.5	40.0	65.0	-1.2	-7.0	
SH8J65*	Dual P		-30	±20	-7.00	21.5	29.0	29.0 *31.0	39.0 *40.8	-1.0	-2.5	40.0	65.0	-1.2	-7.0	SOP-8
SH8K14*	Dual N		30	±20	7.00	20	28	25.0 *28.0	35.0 *39.0	1.0	2.5	30.0	8.0	1.2	7.0	SOP-8
SH8J66*	Dual P		-30	±20	-9.00	13.5	18.5	17.5 *19.0	23.6 *24.7	-1.0	-2.5	60.0	100.0	-1.2	-9.0	SOP-8
SH8K15*	Dual N		30	±20	9.00	15.0	21.0	18.0 *20.0	25.0 *28.0	1.0	2.5	33.0	10.0	1.2	9.0	SOP-8
SH8M14*	N		30	±20	9.00	15.0	21.0	18.0 *20.0	25.0 *28.0	1.0	2.5	33.0	10.0	1.2	9.0	SOP-8
	P		-30	±20	-7.00	21.5	29.0	29.0 *31.0	39.0 *40.8	-1.0	-2.5	40.0	65.0	-1.2	-7.0	
UT4957	Dual P		-30	±20	-7.70	20.0	26.0	30.0	38.0	-1.0	-3.0	11.0	25.0	-1.2	-1.7	SOP-8
UT7317	Dual N		30	±20	6.00	21.0	28.0	27.0	42.0	1.0	2.0	17.0	20.0	1.3	2.0	SOP-8
UT4812	Dual N		30	±20	6.90	22.5	28.0	34.5	42.0	1.0	3.0	4.1	5.2	1.0	1.0	SOP-8
UT4812Z	Dual N		30	±20	6.90	22.5	28.0	34.5	42.0	1.0	3.0	4.1	5.2	1.0	1.0	SOP-8
UT4822	Dual N		30	±20	8.50	13.4	16.0	21.0	26.0	1.0	3.0	4.4	3.3	1.0	1.0	SOP-8
UT4232	Dual N		30	±20	7.80	-	22.0	-	32.0	1.0	3.0	7.0	8.0	1.2	1.7	SOP-8
UD4501*	N		30	±20	9.30	14.0	18.0	17.0	23.0	1.0	3.0	5.0	10.0	1.2	2.1	SOP-8
	P		-20	±8	-5.60	-	-	36.0	46.0	-0.4	-1.5	15.0	25.0	-1.2	-2.1	

# MOSFET

## 30V Trench Combo Power MOSFET

Part No.	Configuration	Equivalent Circuit Diagram	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
			V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	10V		4.5V/4.0V		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
			(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.			TYP.	TYP.	MAX.	Conditions	
UD4606	N		30	±20	6.90	22.5	28.0	34.5	42.0	1.0	3.0	4.1	5.2	1.0	1.0	SOP-8 DIP-8
	P		-30	±20	-6.00	28.0	35.0	44.0	58.0	-1.2	-2.4	5.7	9.5	-1.0	-1.0	
UD4606Z	N		30	±20	6.90	22.5	28.0	34.5	42.0	1.0	3.0	4.1	5.2	1.0	1.0	SOP-8 DIP-8
	P		-30	±20	-6.00	28.0	35.0	44.0	58.0	-1.2	-2.4	5.7	9.5	-1.0	-1.0	
UD8958*	N		30	±20	7.00	21.0	28.0	27.0	40.0	1.0	3.0	7.5	3.7	1.2	1.3	SOP-8
	P		-30	±20	-5.00	41.0	52.0	58.0	80.0	-1.0	-3.0	9.7	12.3	-1.2	-1.3	
UT5003	N		30	±20	7.00	20.5	27.5	30.0	40.0	1.0	2.5	4.0	5.0	1.0	1.0	SOP-8
	P		-30	±20	-5.00	37.5	45.0	62.0	80.0	-1.0	-2.5	5.7	9.5	-1.0	-1.0	
UT5003Z	N		30	±20	7.00	20.5	27.5	30.0	40.0	1.0	2.5	4.0	5.0	1.0	1.0	SOP-8
	P		-30	±20	-5.00	37.5	45.0	62.0	80.0	-1.0	-2.5	5.7	9.5	-1.0	-1.0	
UP2790	N		30	±20	6.00	21.0	28.0	28.0 *34.0	40.0 *53.0	1.5	2.5	8.8	7.4	*0.85	6.0	SOP-8
	P		-30	±20	-6.00	43.0	60.0	58.0 *65.0	80.0 *110.0	-1.0	-2.5	4.8	19.0	*-0.92	-6.0	
UT4810D	N		30	±20	7.50	10.5	13.5	16.0	20.0	1.0	3.0	13.0	15.0	0.485	3.0	SOP-8
	Schottky		30	-	IF=2.40	10.5	13.5	16.0	20.0	-	-	-	-	-	-	
QS8K2*	Dual N		30	±12	3.50	-	-	38.0 *40.0	54.0 *56.0	0.5	1.5	12.0	13.0	1.2	3.5	DFN3X3-8L

## 40V Trench Combo Power MOSFET

Part No.	Configuration	Equivalent Circuit Diagram	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
			V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	10V		4.5V/4.0V		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
			(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.			TYP.	TYP.	MAX.	Conditions	
UTM4052	N		40	±20	7.50	30.0	38.0	-	-	1.3	2.5	10.0	3.0	1.1	2.0	SOP-8=Pin 1 - 8 TO-252-4=Pin (1 - 5)
	P		-40	±20	-6.00	45.0	50.0	-	-	-1.3	-2.5	11.0	12.0	-1.1	-2.0	
UD4614	N		40	±20	6.00	23.2	31.0	32.6	45.0	1.0	3.0	3.3	3.0	1.0	1.0	SOP-8 DFN3X3-8L
	P		-40	±20	-5.00	34.7	45.0	50.6	63.0	-1.0	-3.0	6.7	11.2	-1.0	-1.0	
UD3004*	N		40	±20	12.00	26.0	30.0	-	-	1.2	3.0	5.6	2.8	1.2	7.0	TO-252-4 TO-252-5
	P		-40	±20	-8.80	47.0	55.0	-	-	-1.2	-3.0	7.8	10.0	-1.2	-5.5	
UD606	N		40	±20	8.00	27.0	33.0	37.0	47.0	1.0	3.0	6.0	3.5	1.0	1.0	TO-252-4 TO-252-5 SOP-8
	P		-40	±20	-8.00	35.0	50.0	55.0	70.0	-1.0	-3.0	12.2	12.5	-1.0	-1.0	

## 45V Trench Combo Power MOSFET

Part No.	Configuration	Equivalent Circuit Diagram	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
			V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	10V		4.5V/4.0V		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
			(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.			TYP.	TYP.	MAX.	Conditions	
QS8K21*	Dual N		45	±20	4.00	38.0	53.0	48.0 *53.0	67.0 75.0	1.0	2.5	25.0	7.0	1.2	4.0	DFN3X3-8L

# MOSFET

## 60V Trench Combo Power MOSFET

Part No.	Configuration	Equivalent Circuit Diagram	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
			V <sub>DSS</sub> (V)	V <sub>GSS</sub> (±V)	I <sub>D</sub> (A)	10V		4.5V/4.0V		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
						TYP.	MAX.	TYP.	MAX.							
2N7002KDW*	Dual N		60	±20	0.115	-	3000	-	4000	1.0	2.5	-	-	1.30	0.20	SOT-363
UTT10NP06	N		60	±20	4.50	55.0	64.0	65.0	80.00	1.0	3.0	5.0	7.0	1.20	1.70	SOP-8
	P		-60	±20	-3.00	100.0	125.0	120.0	150.00	-1.0	-3.0	6.0	6.0	-1.20	-1.70	
2NNPP06	Dual N		60	±20	1.80	-	0.25	-	0.35	1.0	3.0	1.4	2.0	0.95	0.45	SOP-8
	Dual P		-60	±20	-1.42	-	0.4	-	0.60	-1.0	-3.0	2.3	5.8	-0.95	-0.80	

## 100V Trench Combo Power MOSFET

Part No.	Configuration	Equivalent Circuit Diagram	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
			V <sub>DSS</sub> (V)	V <sub>GSS</sub> (±V)	I <sub>D</sub> (A)	10V		4.5V/4.0V		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
						TYP.	MAX.	TYP.	MAX.							
UTT6NP10	N		100	±20	3.10	-	150.0	-	-	1.0	3.0	7.0	3.5	1.3	3.1	TO-252-4 SOP-8
	P		-100	±20	-3.20	-	155.0	-	-	-1.0	-3.0	6.0	22.0	-1.3	-3.2	
1NNPP10	Dual N		100	±20	1.00	-	0.7	-	-	2.0	4.0	1.5	2.1	0.95	1.5	SOP-8
	Dual P		-100	±20	-0.85	-	1.0	-	-	-2.0	-4.0	2.1	3.3	-0.95	-0.7	

## Planar Combo Power MOSFET

Part No.	Configuration	Equivalent Circuit Diagram	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
			V <sub>DSS</sub> (V)	V <sub>GSS</sub> (±V)	I <sub>D</sub> (A)	10V		4.5V/4.0V		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
						TYP.	MAX.	TYP.	MAX.							
2N7002DW	Dual N		60	±20	0.30	-	13500	-	-	1.0	2.5	-	-	1.5	0.3	SOT-363
2N7002ZDW	Dual N		60	±20	0.30	-	13500	-	-	1.0	2.5	-	-	1.5	0.3	SOT-363 (ESD Protected)
UP9971	Dual N		60	±25	5.00	-	60.0	-	72.0	1.5	3.0	10.0	5.5	1.2	1.6	SOP-8 DIP-8
12NN10	Dual N		100	±20	2.50	-	150.0	-	-	1.0	3.0	7.0	3.5	1.3	1.5	SOP-8
10NN15	Dual N		150	±20	3.00	-	400.0	-	-	2.0	4.0	7.0	35.0	1.3	3.0	SOP-8



# MOSFET

## POWER MOSFET

### 15V Trench Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	10V		4.5V		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.			TYP.	TYP.	MAX.	Conditions	
UF7476	-	12	±12	15.00	-	-	-	8	0.60	1.90	29.0	8.3	1.20	12.00	SOP-8
100N02	-	15	±8	100.00	-	-	-	12	0.50	1.20	106.0	41.0	1.30	55.00	TO-251 TO-252

### 20V Trench Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	4.5V(*10V)		2.5V		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.			TYP.	TYP.	MAX.	Conditions	
-	UT6302	-20	±12	-0.78	-	600	-	900	-0.70	-1.50	18.0	22.0	-1.20	-0.61	SOT-23 SOT-23-3
-	UT2340	-20	±8	-2.00	52	70	78	110	-0.40	-1.50	9.0	26.0	-1.20	-0.42	SOT-23
-	UT4101	-20	±8	-2.40	70	85	90	120	-0.40	-1.50	12.6	21.0	-1.20	-2.40	SOT-23 SOT-23-3
-	UDN302	-20	±12	-2.40	44	55	64	80	-0.60	-1.50	11.0	15.0	-1.20	-0.42	SOT-23
UT2302	-	20	±8	2.40	-	50	75	95	0.45	-	55.0	10.0	-1.20	-1.00	SOT-23 SOT-23-3
-	UT2327	-20	±12	-2.60	-	130	-	190	-0.50	-	9.7	29.0	-1.20	-1.60	SOT-23
UT2308	-	20	±10	2.70	-	80	-	110	0.40	1.00	55.0	100.0	1.20	1.00	SOT-23
-	UT2301	-20	±8	-2.80	95	130	122	190	-0.45	-	19.0	65.0	-1.20	-1.60	SOT-23 SOT-23-3 DFN2X2-3L
-	UT2301Z	-20	±8	-2.80	95	130	122	190	-0.45	-	19.0	65.0	-1.20	-1.60	SOT-23 (ESD Protected)
-	UT3413	-20	±8	-3.00	81	97	108	130	-0.30	-1.00	12.0	22.0	-1.00	-1.00	SOT-23 SOT-23-3 DFN2X2-3L
-	UT3419	-20	±12	-3.50	76	95	111	145	-0.70	-1.40	6.7	13.5	-0.95	-1.00	SOT-23
-	UT2035Z	-20	±8	-3.60	30	42	50	65	-0.40	-1.00	12.4	42.4	-1.00	-1.00	SOT-23
-	UT2321	-20	±12	-3.80	45	55	65	80	-0.40	-1.00	8.0	29.0	-1.20	-0.42	SOT-23 DFN2X2-6L
-	UT2311	-20	±8	-4.00	45	55	75	85	-0.45	-	45.0	65.0	-1.20	-1.60	SOT-23 DFN2X2-6L
-	UT3415*	-20	±8	-4.00	35	43	45	54	-0.30	-1.00	17.0	35.0	-1.00	-1.00	SOT-23 DFN2X2-6L
-	UT2305	-20	±12	-4.20	-	65	-	100	-0.50	-1.20	3.6	2.6	-1.20	-1.20	SOT-23 SOT-23-3 SOT-26
UT3414	-	20	±8	4.20	41	50	52	63	0.40	1.00	6.3	12.7	1.00	1.00	SOT-23
UML2502	-	20	±12	4.20	35	45	50	80	0.60	1.20	10.0	26.0	1.20	1.30	SOT-23
-	UT3443	-20	±12	-4.50	50	65	80	100	-0.60	-1.40	32.0	45.0	-1.20	-1.70	SOT-26 DFN2X2-6L
UT2312	-	20	±8	5.00	25	33	35	40	0.45	-	40.0	31.0	1.20	1.00	SOT-23
UTM2054	-	20	±16	5.00	45	54	110	130	0.60	1.50	15.0	6.0	1.30	3.00	SOT-23 SOT-89
UT8205A	-	20	±12	6.00	-	28	-	38	0.50	1.50	70.0	65.0	1.20	1.70	SOT-26 SOP-8 TSSOP-8 DFN3X2-8L
UT8205AZ	-	20	±12	6.00	-	28	-	38	0.50	1.50	70.0	65.0	1.20	1.70	SOT-26 SOP-8 TSSOP-8
UT3446*	-	20	±12	6.20	19	24	25	32	0.40	1.50	13.0	11.0	1.20	1.30	SOT-26 DFN3X2-8L
UT3416	-	20	±8	6.50	18	22	21	26	0.40	1.00	12.7	16.0	1.00	1.00	SOT-23 DFN3X2-8L
-	UT3310	-20	±12	-10.00	-	150	-	250	-0.50	-	60.0	60.0	-1.20	-10.00	TO-251 TO-252 DFN3X3-8L
UP9T15G	-	20	±12	12.50	-	50	-	80	0.50	1.50	55.0	3.0	1.30	10.00	TO-251 TO-252
UTP45N02	-	20	±10	45.00	-	22	-	-	1.00	2.00	160.0	20.0	1.50	45.00	TO-220 TO-220F TO-220F1 TO-251 TO-252 TO-263
90N02	-	20	±8	90.00	-	12	-	-	0.55	1.20	106.0	41.0	1.25	90.00	TO-251
90N02A*	-	20	±8	90.00	-	10	-	-	0.55	1.20	106.0	41.0	1.25	90.00	TO-251
UTT200N02	-	20	±20	200.00	*2.0	*2.4	-	-	1.00	3.00	8.0	17.0	1.30	200.00	TO-220
UTD50N024-06P*	-	22	±20	80.00	7.3	9.5	-	-	0.80	3.00	10.0	9.0	1.50	50.00	TO-251 TO-252

# MOSFET

## 25V Trench Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GS</sub>	I <sub>D</sub>	10V		4.5V		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.			TYP.	TYP.	MAX.	Conditions	
-	UP2003	-25	±20	-9.00	15.0	20.0	25.0	35.0	-1.00	-3.00	10.0	5.0	-1.20	-2.10	TO-251 TO-252 DFN3X3-8L
UT3055	-	25	±16	12.00	-	70.0	-	95.0	1.10 typ	-	-	-	1.00	5.00	TO-251 TO-252
UTT3055*	-	25	±16	12.00	-	70.0	-	95.0	1.10 typ	-	-	-	1.00	5.00	TO-251 TO-252
UTN3055	-	25	±20	12.00	50.0	90.0	-	-	0.80	2.50	6.0	5.0	1.50	12.00	TO-251 TO-252
UT45N03	-	25	±15	40.00	13.0	21.0	-	-	1.00	2.00	60.0	40.0	1.20	25.00	TO-251 TO-252
UTM2513	-	25	±20	40.00	10.5	13.0	16.0	23.0	1.30	2.50	60.0	168.0	1.30	10.00	TO-251 TO-252
UT1432*	-	25	±20	44.00	6.5	8.5	11.5	14.0	1.00	3.00	10.0	6.2	1.00	1.00	SOP-8
UT50N03	-	25	±20	45.00	12.5	14.0	19.0	23.0	1.00	2.00	84.0	4.0	1.10	30.00	TO-251 TO-252
UTT50N03*	-	25	±20	45.00	12.5	14.0	19.0	23.0	1.00	2.00	84.0	4.0	1.10	30.00	TO-251 TO-252
UTD472*	-	25	±20	50.00	5.0	6.0	7.6	9.5	1.00	2.50	11.0	8.0	1.00	1.00	TO-251 TO-252
UTD452	-	25	±20	55.00	6.5	8.5	11.5	14.0	1.00	3.00	10.0	6.2	1.00	1.00	TO-251 TO-252
UTM2056*	-	25	±20	60.00	5.0	6.0	7.0	10.0	1.00	2.00	9.0	14.0	1.30	20.00	TO-251 TO-252
UK3919	-	25	±20	64.00	4.5	5.6	-	-	2.00	3.00	19.0	22.0	*0.97	64.00	TO-251 TO-252
UT75N02	-	25	±20	75.00	5.0	7.0	-	-	1.00	3.00	7.0	6.0	1.30	75.00	TO-220 TO-251

## 30V Trench Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GS</sub>	I <sub>D</sub>	10V (*4.0V)		4.5V(*2.5V)		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.			TYP.	TYP.	MAX.	Conditions	
UK3018	-	30	±20	0.10	*5000	*8000	*7000	*13000	0.80	1.50	35.0	80.0	-	-	SOT-23-3 SOT-323
UK3019	-	30	±20	0.10	*5000	*8000	*7000	*13000	0.80	1.50	35.0	80.0	-	-	SOT-23-3
-	UT3P01Z	-30	±10	-0.10	*8000	*10400	*11000	*15400	-0.40	-1.40	55.0	130.0	-1.20	-0.10	SOT-323 SOT-523 SOT-23-3
UT3N01Z	-	30	±10	0.15	*2900	*3700	*3700	*5200	0.40	1.30	65.0	120.0	1.20	0.15	SOT-323 SOT-523
-	UTR4502	-30	±20	-1.13	155.0	200.0	240.0	350.0	-1.00	-3.00	12.0	17.5	-1.20	-1.25	SOT-23 SOT-23-3
-	UT7401	-30	±12	-1.20	122.0	150.0	147.0	200.0	-0.60	-1.40	3.2	14.5	-1.00	-1.00	SOT-23 SOT-23-3 SOT-323
-	UT2352	-30	±25	-1.30	150.0	180.0	250.0	300.0	-0.80	-2.50	15.0	1.0	-1.20	-0.42	SOT-23
UTD351	-	30	±20	1.40	92.0	160.0	120.0	250.0	0.80	3.00	8.0	2.0	1.20	0.42	SOT-23
UT7400*	-	30	±12	1.70	70.0	85.0	81.0	100.0	0.60	1.40	2.3	3.0	1.00	1.00	SOT-23
UT2304	-	30	±20	2.50	-	117.0	-	190.0	1.00	3.00	9.0	2.0	1.20	1.20	SOT-23 SOT-23-3
-	UT3403	-30	±12	-2.60	102.0	130.0	128.0	180.0	-0.60	-1.40	4.4	8.0	-1.00	-1.00	SOT-23 SOT-23-3
-	UT3409	-30	±20	-2.60	97.0	130.0	166.0	200.0	-1.00	-3.00	3.2	6.8	-1.00	-1.00	SOT-23 SOT-23-3
UT2306	-	30	±8	3.50	42.0	65.0	-	-	1.00	2.00	8.0	6.2	1.30	1.25	SOT-23 VDFN1.6X1.6-6L
-	UTC654	-30	±20	-3.60	63.0	75.0	100.0	125.0	-1.00	-3.00	13.0	6.0	-1.20	-1.30	SOT-26 DFN2X2-6L
UT2316	-	30	±20	3.60	42.0	50.0	68.0	85.0	0.80	-	9.0	6.0	1.20	0.80	SOT-23 VDFN1.6X1.6-6L
UT3406	-	30	±20	3.60	50.0	65.0	75.0	105.0	1.00	3.00	1.9	2.6	1.00	1.00	SOT-23 VDFN1.6X1.6-6L
-	UT2309	-30	±20	-3.70	-	75.0	-	120.0	-1.00	-3.00	5.0	7.0	-1.20	-1.00	SOT-23 DFN2X2-6L

# MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(on)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GS</sub>	I <sub>D</sub>	10V (*4.0V)		4.5V (*2.5V)		V <sub>GS(th)</sub> (V)		T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.	MIN.	MAX.	TYP.	TYP.	MAX.	Conditions	
UT3418	-	30	±12	3.80	43.0	60.0	52.0	70.0	1.00	1.80	3.2	2.1	1.00	1.00	SOT-23 VDFN1.6X1.6-6L
-	UT06P03	-30	±20	-4.00	37.0	45.0	60.0	75.0	-0.90	-3.00	10.0	5.0	-1.20	-1.00	SOT-89
-	UT3401	-30	±12	-4.20	42.0	50.0	53.0	65.0	-0.70	-1.30	3.2	12.0	-1.00	-1.00	SOT-23 DFN2X2-6L
-	UT3401Z	-30	±12	-4.20	42.0	50.0	53.0	65.0	-0.70	-1.30	3.2	12.0	-1.00	-1.00	SOT-23 DFN2X2-6L
-	UT2305A	-30	±12	-4.20	-	60.0	-	80.0	-0.50	-1.20	3.6	2.6	-1.20	-1.20	SOT-23 DFN2X2-6L
-	UT9435	-30	±20	-4.20	-	50.0	-	90.0	-1.00	-3.00	7.0	14.0	-1.30	-1.00	TO-251 TO-252 SOT-89 SOP-8 DFN2X2-6L
-	UT6401	-30	±12	-5.00	42.0	49.0	53.0	64.0	-0.70	-1.30	3.0	11.0	-1.00	-1.00	SOT-26
-	UT9435H	-30	±20	-5.30	44.0	50.0	74.0	90.0	-1.00	-3.00	9.0	36.0	-1.30	-5.30	SOP-8 SOT-223 SOT-23 SOT-26
-	UT9435HZ	-30	±20	-5.30	44.0	50.0	74.0	90.0	-1.00	-3.00	9.0	36.0	-1.30	-5.30	SOP-8 SOT-223
UT3404	-	30	±20	5.80	22.5	28.0	34.5	43.0	1.00	3.00	3.8	5.0	1.00	1.00	SOT-23
UT3400	-	30	±12	5.80	22.8	28.0	27.3	33.0	0.70	1.40	5.1	4.2	1.00	1.00	SOT-23 DFN2X2-6L
SSM3K333R	-	30	±20	6.00	18.7	28.0	25.7	42.0	1.30	2.50	-	-	1.20	6.00	SOT-23
-	UT4405*	-30	±20	-6.00	40.0	50.0	65.0	85.0	-1.00	-3.00	5.0	13.5	-1.00	-1.00	SOP-8
UT4800	-	30	±25	6.50	15.5	18.5	23.0	30.0	0.80	1.80	12.0	14.0	1.20	2.30	SOP-8
UT6402	-	30	±20	6.90	22.5	28.0	34.5	42.0	1.00	3.00	4.1	5.2	1.00	1.00	SOT-23 SOT-26
-	UT4411	-30	±20	-8.00	24.5	32.0	41.0	55.0	-1.20	-2.40	3.4	8.4	-1.00	-1.00	SOP-8 DFN2X2-8L
-	UTT4815	-30	±25	-8.00	16.2	20.0	37.0	-	-1.00	-3.00	12.0	30.5	-1.00	-1.00	SOP-8 DFN3X3-8L
UTD410	-	30	±20	8.00	48.0	65.0	75.0	105.0	1.00	3.00	3.7	2.6	1.00	1.00	TO-251 TO-252
UT4404	-	30	±12	8.50	18.0	24.0	22.0	30.0	0.70	1.40	3.5	2.7	1.00	1.00	SOP-8 DFN2X2-8L
UT4414	-	30	±20	8.50	20.0	26.0	31.0	40.0	1.00	3.00	4.2	4.9	1.00	1.00	SOP-8
-	UT4435	-30	±25	-8.80	15.0	20.0	22.0	35.0	-1.00	-3.00	13.5	25.0	-1.20	-2.10	SOP-8 DFN3X3-8L
UD4809	-	30	±20	9.00	7.0	9.0	12.0	14.0	1.50	2.50	21.3	5.3	1.20	30.00	TO-251 TO-252 DFN2X2-8L
UTD420	-	30	±20	10.00	21.0	28.0	32.5	42.0	1.00	3.00	2.4	2.2	1.00	1.00	TO-251 TO-252
UT4422	-	30	±20	11.00	12.6	15.0	19.6	24.0	1.00	3.00	3.9	3.2	1.00	1.00	SOP-8
UT4406	-	30	±12	11.50	11.5	14.8	13.5	17.5	0.80	1.50	5.0	5.0	1.00	10.00	SOP-8
UT4410	-	30	±20	11.60	12.0	18.0	17.0	20.0	1.30	3.00	12.0	4.0	1.10	2.30	SOP-8
UT4468*	-	30	±20	11.60	11.0	14.0	17.4	22.0	1.50	3.00	6.0	4.5	1.00	1.00	SOP-8
UT3120*	-	30	±20	11.60	11.0	14.0	17.4	22.0	1.50	3.00	6.0	4.5	1.00	1.00	SOP-8
-	UTT4407	-30	±25	-12.00	11.0	14.0	24.0	-	-1.70	-3.00	8.2	12.0	-1.00	-1.00	SOP-8
UT4392	-	30	±20	12.50	9.0	11.5	13.0	16.5	1.00	3.00	3.5	6.0	1.30	2.70	SOP-8
-	UT6679*	-30	±25	-13.00	7.3	9.0	10.0	13.0	-1.00	-3.00	10.0	65.0	-1.20	-2.10	SOP-8
UT4420*	-	30	±12	13.70	8.3	10.5	9.7	12.0	0.60	2.00	3.4	5.9	1.00	1.00	SOP-8
UT4424*	-	30	±25	13.80	-	9.0	-	14.0	1.00	3.00	9.0	17.0	1.20	2.10	SOP-8
-	UTT4425	-30	±25	-14.00	8.8	11.0	-	-	-2.00	-3.50	9.2	45.5	-1.00	-1.00	SOP-8
UTD4806*	-	30	±20	14.00	4.9	6.0	7.9	9.4	1.50	2.50	23.8	4.7	1.20	30.00	TO-251 TO-252

# MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>BSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	10V (*4.0V)		4.5V (*2.5V)		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.			TYP.	TYP.	MAX.	Conditions	
-	UT4413	-30	±25	-15.00	6.6	8.5	-	-	-1.50	-3.50	23.5	82.0	-1.00	-1.00	SOP-8
UT4446	-	30	±20	15.00	6.9	8.5	11.8	14.5	1.00	3.00	8.2	6.7	1.00	1.00	SOP-8
-	UTD405	-30	±20	-18.00	24.5	32.0	41.0	60.0	-1.20	-2.40	25.0	12.0	-1.00	-1.00	TO-251 TO-252
UTD408	-	30	±20	18.00	13.6	18.0	20.6	27.0	1.00	2.50	3.9	3.2	1.00	1.00	TO-251 TO-252
UT4430	-	30	±20	18.00	4.7	5.5	6.2	7.5	1.00	2.50	8.0	8.8	1.00	1.00	SOP-8
-	UT20P03*	-30	±20	-19.00	-	-	-	-	1.00	2.00	178.0	72.0	-3.40	-19.00	TO-251 TO-252
UT20N03	-	30	±20	20.00	15.5	20.0	22.9	31.0	1.20	2.00	11.0	18.0	1.40	30.00	TO-251 TO-252 DFN5X6-8L DFN3X3-8L
UT7410	-	30	±20	24.00	18.0	24.0	27.0	32.0	1.40	2.50	3.2	6.0	1.00	1.00	DFN3X3-8L
UTD484	-	30	±20	25.00	12.1	15.0	18.5	23.0	1.00	2.50	12.0	6.0	1.00	1.00	TO-251 TO-252 DFN3X3-8L
-	UT30P03	-30	±20	-26.00	30.0	40.0	40.0	60.0	-1.00	-3.00	50.0	180.0	-1.20	-10.00	TO-251 TO-252
UT40N03T	-	30	±25	28.00	-	25.0	-	45.0	1.00	3.00	62.0	4.4	1.30	28.00	TO-251 TO-252 TO-220F1 TO-220 TO-263 TO-262 DFN5X6-8L
UTM3023	-	30	±20	30.00	15.0	20.0	22.0	28.0	1.00	2.00	17.0	20.0	1.30	15.00	SOT-223 TO-252 TO-252 TO-220 TO-220F TO-220F1 TO-263 DFN5X6-8L
UT30N03	-	30	±20	30.00	20.0	30.0	30.0	45.0	1.00	-	10.0	15.0	1.50	30.00	TO-251 TO-252 TO-220F1 TO-220 TO-220F TO-263 TO-262 DFN5X6-8L DFN3X3-8L
UT7430	-	30	±20	34.00	10.0	12.0	13.0	16.0	1.50	2.50	9.0	6.0	1.00	1.00	DFN3X3-8L
-	UT36P03*	-30	±20	-36.00	-	38.0	-	58.0	-1.00	-3.00	16.0	10.0	-1.20	-36.00	TO-251 TO-252
-	UTT36P03	-30	±20	-36.00	-	38.0	-	58.0	-1.00	-3.00	16.0	10.0	-1.20	-36.00	TO-251 TO-252
UT40N03	-	30	±20	40.00	14.0	17.0	20.0	23.0	1.00	3.00	60.0	10.0	1.30	40.00	TO-251 TO-252 TO-220F1 TO-220 TO-263 TO-262
UTT40N03	-	30	±20	40.00	14.0	17.0	20.0	23.0	1.00	3.00	60.0	10.0	1.30	40.00	TO-251 TO-252
UTD8878*	-	30	±20	40.00	11.0	15.0	14.0	18.5	1.20	2.50	79.0	27.0	1.25	35.00	TO-251 TO-252
UT60T03	-	30	±20	45.00	-	12.0	-	25.0	1.00	3.00	57.5	6.4	1.30	45.00	TO-251 TO-252 TO-220F1 TO-220 TO-263 TO-262 TO-220F DFN3X3-8L
UTL1426	-	30	±12	46.00	8.5	10.5	10.2	12.5	1.00	2.50	6.3	2.8	1.00	1.00	SOP-8 DFN3X3-8L
UT8880*	-	30	±20	54.00	9.5	11.6	12.0	14.5	1.20	2.50	107.0	51.0	1.25	40.00	TO-251 TO-252 DFN5X6-8L
UT3006	-	30	±20	55.00	-	9.0	-	16.0	1.00	3.00	85.0	10.0	1.20	30.00	TO-251 TO-252 DFN5X6-8L
-	UT60P03*	-30	±20	-60.00	-	27.0	-	-	-2.00	-4.00	75.0	40.0	-1.75	-60.00	TO-251 TO-252 TO-220F1 TO-220 TO-263 TO-262
-	UTT60P03	-30	±20	-60.00	-	27.0	-	-	-2.00	-4.00	75.0	40.0	-1.75	-60.00	TO-252
60N03*	-	30	±20	60.00	14.0	23.0	24.0	30.0	1.00	3.00	26.0	28.0	1.25	19.00	TO-251 TO-252 TO-220F1 TO-220 TO-263 TO-262 DFN5X6-8L
UT60N03	-	30	±20	60.00	14.0	23.0	24.0	30.0	1.00	3.00	26.0	28.0	1.25	19.00	TO-251 TO-252 TO-220F1 TO-220 TO-263 TO-262 DFN5X6-8L
UTT60N03*	-	30	±20	60.00	14.0	23.0	24.0	30.0	1.00	3.00	26.0	28.0	1.25	19.00	TO-251 TO-252 TO-220F1 TO-220 TO-263 TO-262
UT70N03	-	30	±20	60.00	-	9.0	-	18.0	1.00	3.00	105.0	8.5	1.30	60.00	TO-251 TO-252 DFN5X6-8L
UTD436	-	30	±20	60.00	5.4	7.5	9.8	13.0	1.00	3.00	11.6	7.7	1.00	1.00	TO-251 TO-252 DFN5X6-8L
UT65N03	-	30	±20	65.00	6.5	8.4	9.7	14.6	1.30	3.00	18.6	8.8	1.10	20.00	TO-251 TO-252 TO-220F1 TO-220 TO-263 TO-262 DFN5X6-8L
-	UT70P03	-30	±20	-75.00	-	8.0	-	10.0	-1.00	-3.00	77.0	67.0	-1.30	-45.00	TO-251 TO-252 TO-220F1 TO-220 TO-263 TO-262
-	UTT75P03	-30	±20	-75.00	5.5	7.0	8.0	10.0	-1.00	-3.00	225.0	210.0	-1.50	-75.00	TO-251 TO-252 TO-220F1 TO-220 TO-263 TO-262
UT75N03	-	30	±20	75.00	5.0	7.0	7.0	10.0	1.00	3.00	12.0	40.0	1.50	75.00	TO-251 TO-252 TO-220F1 TO-220 TO-263 TO-262 DFN3X3-8L
UT3009	-	30	±20	78.00	4.7	5.5	7.5	9.0	1.00	2.50	21.6	10.5	1.00	1.00	TO-251 TO-252 DFN5X6-8L

# MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GS</sub>	I <sub>D</sub>	10V (*4.0V)		4.5V (*2.5V)		V <sub>GS(th)</sub> (V)		T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.	MIN.	MAX.	TYP.	TYP.	MAX.	Conditions	
ULB4132	-	30	±20	78.00	3.05	5.3	4.2	8.0	1.35	2.35	95.0	36.0	1.00	32.00	TO-220 DFN5X6-8L
UT85N03	-	30	±20	85.00	-	6.0	-	10.0	1.00	3.00	77.0	67.0	1.30	45.00	TO-251 TO-252 TO-220 DFN5X6-8L
UT90N03	-	30	±20	90.00	2.4	2.9	2.7	3.3	1.50	2.50	11.0	10.0	1.20	22.00	TO-251 TO-252 TO-220
UTT90N03*	-	30	±20	90.00	2.4	2.9	2.7	10.0	1.50	2.50	11.0	10.0	1.20	22.00	TO-251 TO-252 TO-220
-	UTT100P03	-30	-16/+5	-100.00	3.3	4.3	4.8	7.6	-1.00	-2.10	45.0	180.0	-1.20	-80.00	TO-220
UT100N03	-	30	±20	100.00	3.05	5.3	4.2	8.0	1.00	3.00	10.0	34.0	1.50	20.00	TO-251 TO-252 TO-220F1 TO-220 TO-263 TO-262 DFN5X6-8L
UT100N03-Q	-	30	±20	100.00	3.36	5.3	5.25	8.0	1.00	3.00	10.0	34.0	1.50	20.00	TO-251 TO-252 TO-220F1 TO-220 TO-263 TO-262 DFN5X6-8L
UT108N03	-	30	±20	108.00	4.2	5.3	-	6.6	1.00	3.00	102.0	54.0	1.25	108.00	TO-251 TO-252 TO-220F1 TO-220 TO-263 TO-262 DFN5X6-8L
UTT108N03	-	30	±20	108.00	4.2	5.3	-	6.6	1.00	3.00	102.0	54.0	1.25	108.00	TO-220 DFN5X6-8L
UT110N03	-	30	±20	110.00	3.9	4.8	5.2	7.0	1.00	3.00	10.0	34.0	1.50	20.00	TO-220 DFN5X6-8L
UT120N03	-	30	±20	120.00	-	3.8	-	6.4	1.00	3.00	96.0	37.0	1.25	120.00	TO-220 TO-263
UT136N03	-	30	±20	136.00	3.6	4.5	-	5.6	1.00	3.00	10.0	34.0	1.50	20.00	TO-220 TO-263 DFN5X6-8L
UTT150N03	-	30	±20	150.00	3.4	4.1	4.0	4.6	1.00	3.00	105.0	46.0	1.25	150.00	TO-220 TO-263 DFN5X6-8L
UT180N03*	-	30	±20	180.00	3.4	4.1	4.0	4.6	1.00	3.00	105.0	46.0	1.25	150.00	TO-220 TO-263
UTT200N03	-	30	±20	200.00	-	2.6	-	-	1.00	3.00	8.0	17.0	1.30	100.00	TO-220
UTT220N03	-	30	±20	220.00	2.0	2.4	-	-	1.00	3.00	8.0	17.0	1.30	80.00	TO-220 TO-263 DFN5X6-8L

## 40V Trench Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GS</sub>	I <sub>D</sub>	10V		4.5V		V <sub>GS(th)</sub> (V)		T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.	MIN.	MAX.	TYP.	TYP.	MAX.	Conditions	
UT4450	-	40	±20	7.00	24.0	30.0	30.0	38.0	1.70	3.00	3.6	6.6	1.00	1.00	SOP-8
-	UT9564	-40	±25	-7.30	-	28.0	-	40.0	-1.00	-3.00	8.0	17.0	-1.20	-2.00	SOP-8 TO-252
-	UT5504	-40	±20	-8.00	38.0	55.0	65.0	94.0	-1.00	-2.50	9.7	12.3	-1.00	-8.00	TO-251 TO-252
UTD454	-	40	±20	12.00	25.0	33.0	34.0	47.0	1.80	3.00	6.0	3.5	1.00	1.00	TO-251 TO-252
-	UTD413	-40	±20	-12.00	36.0	45.0	51.0	69.0	-1.00	-3.00	12.2	12.5	-1.00	-1.00	TO-251 TO-252
-	UTT20P04	-40	±20	-20.00	30.0	40.0	-	-	-1.00	-3.00	16.0	10.0	-1.20	-20.00	TO-252 TO-220 TO-220F TO-220F1 TO-263
-	UT30P04	-40	±20	-21.00	30.0	40.0	-	-	-1.00	-3.00	16.0	10.0	-1.20	-10.00	TO-251 TO-252
-	UTT30P04	-40	±20	-21.00	30.0	40.0	-	-	-1.00	-3.00	16.0	10.0	-1.20	-10.00	TO-252 TO-220 TO-220F TO-220F1 TO-263
UTT25N04*	-	40	±20	25.00	20.0	25.0	31.0	40.0	1.00	3.00	47.0	5.0	1.30	25.00	TO-252 TO-220 TO-220F TO-220F1 TO-263
UT40N04	-	40	±20	25.00	19.0	29.0	-	-	2.00	3.00	6.0	6.0	1.30	10.00	TO-252
-	UTT40P04	-40	±20	-50.00	10.1	12.3	14.5	18.0	-1.00	-3.00	7.0	15.0	-1.20	-12.70	TO-220 TO-251
UTT60N04*	-	40	±20	60.00	3.5	4.5	5.1	6.5	1.00	3.00	80.0	100.0	1.50	60.00	TO-252 TO-220 TO-220F TO-220F1 TO-263
-	UTT50P04	-40	±20	-60.00	10.5	13.0	17.0	22.0	-1.00	-3.00	18.0	47.0	-1.50	-50.00	TO-252 TO-220 TO-220F TO-220F1 TO-263
-	UTT65P04	-40	±20	-65.00	12.0	15.0	18.0	23.0	-1.00	-3.00	380.0	140.0	-1.50	-65.00	TO-220
-	UTT75P04*	-40	±20	-75.00	7.7	9.7	-	-	-1.00	-2.50	11.0	180.0	-1.50	-75.00	TO-263 TO-220 TO-3P TO-247

# MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	10V		4.5V		MIN. MAX.		T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.	TYP.	MAX.	TYP.	TYP.	MAX.	Conditions	
-	UTT90P04*	-40	±20	-90.00	3.5	4.7	-	-	-2.00	-4.00	8.0	14.0	-1.30	-90.00	TO-220
-	UTT100P04*	-40	±20	-100.00	2.8	3.5	3.4	5.1	-1.00	-2.50	30.0	100.0	-1.50	-100.00	TO-263 TO-220 TO-3P TO-247
UT120N04*	-	40	±20	120.00	3.5	4.0	-	-	2.00	4.00	140.0	26.0	1.30	120.00	TO-263 TO-220 TO-3P TO-247
UTT120N04	-	40	±20	120.00	3.5	4.0	-	-	1.00	3.00	140.0	26.0	1.28	120.00	TO-263 TO-220 TO-3P TO-247
-	UTT150P04*	-40	±20	-150.00	5.5	6.9	7.0	8.8	-1.00	-3.00	160.0	240.0	-1.50	-150.00	TO-263 TO-220 TO-3P TO-247
UT150N04	-	40	±20	150.00	3.5	4.0	-	-	2.00	4.00	140.0	26.0	1.30	150.00	TO-263 TO-220 TO-3P TO-247
UTT150N04*	-	40	±20	150.00	3.5	4.0	-	-	2.00	4.00	140.0	26.0	1.30	150.00	TO-263 TO-220 TO-3P TO-247
UTF1404	-	40	±20	162.00	3.5	4.0	-	-	2.00	4.00	140.0	26.0	1.30	95.00	TO-220
UF1404	-	40	±20	162.00	3.5	4.0	-	-	2.00	4.00	140.0	26.0	1.30	95.00	TO-220

## 50V Trench Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	10V (*4.0V)		4.5V(*2.5V)		MIN. MAX.		T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.	TYP.	MAX.	TYP.	TYP.	MAX.	Conditions	
UK2158	-	50.00	±7	±0.10	*12000	*15000	*16000	*20000	0.50	1.10	48.0	31.0	-	-	SOT-23-3
-	BSS84Z	-50.00	±20	-0.13	-	-	1200.0	10000.0	-0.80	-2.00	6.3	4.8	-1.20	-0.13	SOT-23-3
BSS139Z	-	50.00	±20	0.20	-	-	-	3500.0	0.50	1.50	-	-	-	-	SOT-23-3 (ESD Protected)
BSS138	-	50.00	±20	0.22	700.0	3500.0	1000.0	6000.0	0.80	1.50	9.0	7.0	1.40	0.44	SOT-23 SOT-23-3 SOT-323
UK1398	-	50.00	±7	±0.10	*14000	*20000	*22000	*40000	1.00	3.00	100.0	35.0	1.30	1.00	SOT-223 TO-92
UP672	-	50.00	±7	0.10	*15000	*20000	*20000.0	*40000	0.70	1.50	50.0	40.0	-	-	SOT-363
UTT30N05	-	50.00	±20	30.00	32.0	40.0	-	-	2.00	4.00	79.0	52.0	1.40	30.00	TO-252
UTT36N05	-	50.00	±15	36.00	-	-	33.0	40.0	1.00	2.50	550.0	180.0	1.60	36.00	TO-220
UTT50N05	-	50.00	±20	50.00	18.0	23.0	-	-	2.00	4.00	100.0	80.0	1.50	50.00	TO-252
60N05	-	50.00	±20	60.00	12.0	14.0	-	-	2.00	4.00	180.0	35.0	1.60	60.00	TO-220
UTT60N05	-	50.00	±20	60.00	14.0	18.0	-	-	2.00	4.00	11.0	15.0	1.60	60.00	TO-220
UTT80N05	-	50.00	±20	80.00	5.1	7.0	-	-	2.00	4.00	34.0	23.0	1.25	80.00	TO-220
UTT100N05	-	50.00	±20	100.00	7.0	-	10.0	-	1.00	3.00	130.0	280.0	1.50	100.00	TO-220

## 55V Trench Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	10V		4.5V		MIN. MAX.		T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.	TYP.	MAX.	TYP.	TYP.	MAX.	Conditions	
UTT3205	-	55	±20	110.00	-	8	-	-	1.40	3.00	101.0	65.0	1.30	62.00	TO-220

# MOSFET

## 60V Trench Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ) at V <sub>GS</sub> =				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	10V		4.5V				T <sub>r</sub> (nS)	T <sub>f</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.	MIN.	MAX.	TYP.	TYP.	MAX.	Conditions	
02N06Z	-	60	±20	0.20	1700	2400	2800	4000	1.00	2.50	5.0	95.0	-	-	SOT-323 (ESD Protected)
UM6K31N	-	60	±20	±0.25	1700	2400	2100	3000	1.00	2.50	5.0	28.0	1.20	0.25	SOT-363
UMBF170	-	60	±20	0.30	2800	5000	3800	5300	1.00	-	-	-	1.50	0.30	SOT-23-3
2N7002	-	60	±20	0.30	-	7500	-	-	1.00	2.50	-	-	1.50	0.30	SOT-23-3
2N7002K	-	60	±20	0.30	-	2000	-	4000	1.00	2.50	-	-	1.50	0.30	SOT-23-3
2N7002KT*	-	60	±20	0.30	-	2000	-	4000	1.00	2.50	-	-	1.50	0.30	SOT-523
2N7002KW*	-	60	±20	0.30	-	2000	-	4000	1.00	2.50	-	-	1.50	0.30	SOT-323
-	UT2P06	-60	±20	-1.42	-	400.0	-	600.0	-1.00	-3.00	2.3	5.8	-0.95	-1.42	SOT-23
-	2P06*	-60	±20	-2.00	200.0	250.0	240.0	300.0	-1.00	-3.00	5.0	3.0	-1.20	-1.20	SOT-23
-	UT3P06	-60	±20	-3.00	190.0	220.0	265.0	310.0	-1.00	-	12.0	12.0	-1.20	-3.00	SOT-26 SOT-26
UT3N06	-	60	±20	3.00	-	90.0	-	120.0	1.00	3.00	5.0	3.0	1.20	1.20	SOT-23 SOT-89 TO-251 TO-252
UT3458	-	60	±20	4.10	82.0	100.0	105.0	128.0	1.50	3.00	17.0	10.0	1.20	2.50	SOT-26 DFN2X2-6L
UT9971P	-	60	±25	5.00	-	50.0	-	20.0	1.00	3.00	10.0	5.5	1.20	5.00	SOT-223 SOP-8 TO-252
UTM6006	-	60	±20	6.30	-	18.0	-	20.0	1.20	2.50	100.0	190.0	1.00	6.30	SOP-8 DFN-8(5X6)
UTM6016	-	60	±20	8.00	-	12.0	-	15.0	1.20	2.50	100.0	190.0	1.20	8.00	SOP-8
-	UTT15P06	-60	±20	-15.00	-	90.0	-	-	-1.00	-3.00	30.0	20.0	-1.50	-15.00	TO-252
-	UTT18P06	-60	±20	-18.30	48.0	60.0	-	-	-1.00	-3.00	58.0	60.0	-1.50	-18.30	SOT-223 TO-251 TO-252
UTT20N06	-	60	±20	20.00	37.5	46.0	-	-	2.00	4.00	60.5	37.1	1.20	20.00	TO-252 TO-220 TO-220F TO-220F1 TO-263 DFN3X3-8L
-	UTT25P06	-60	±15	27.50	65.0	75.0	-	-	-1.20	-2.40	72.0	190.0	-2.50	-25.00	SOT-223 TO-251 TO-252
UTN6226	-	60	±20	30.00	12.0	15.0	15.0	19.0	1.50	2.50	2.5	2.5	1.00	30.00	DFN8(5X6)
-	UTT30P06	-60	±15	-30.00	67.0	80.0	-	-	-1.20	-2.40	25.9	52.4	-3.00	-30.00	TO-252 TO-220 TO-220F TO-220F1 TO-263
UTT30N06	-	60	±20	30.00	32.0	40.0	-	-	1.00	3.00	79.0	52.0	1.40	30.00	TO-252 TO-220 TO-220F TO-220F1 TO-263
-	UTT40P06*	-60	±20	-40.00	20.0	32.0	-	20.0	-1.00	-3.00	70.0	175.0	-1.60	-40.00	TO-252 TO-220 TO-220F TO-220F1 TO-263
-	UTT50P06	-60	±20	-50.00	12.0	15.0	-	20.0	-1.00	-3.00	70.0	175.0	-1.60	-50.00	TO-252 TO-220 TO-220F TO-220F1 TO-263
UTT50N06	-	60	±20	50.00	16.0	20.0	-	-	2.00	4.00	100.0	80.0	1.50	50.00	TO-252 TO-220 TO-220F TO-220F1 TO-263
-	UTT60P06*	-60	±20	-60.00	-	30.0	-	-	-2.00	-4.00	60.0	20.0	-1.50	-45.00	TO-252 TO-220 TO-220F TO-220F1 TO-263
UTT60N06	-	60	±20	60.00	14.0	18.0	-	-	2.00	4.00	11.0	15.0	1.60	60.00	TO-252 TO-220 TO-220F TO-220F1 TO-263
UTT75N06*	-	60	±20	75.00	4.8	6.0	-	-	1.50	2.50	15.0	11.0	1.50	75.00	TO-220 TO-220F TO-220F1 TO-263
-	UTT80P06	-60	±20	-80.00	21.0	23.0	-	-	-2.10	-4.00	18.0	30.0	-1.60	-80.00	TO-220 TO-220F TO-220F1 TO-263
UTT80N06	-	60	±20	80.00	8.5	10.0	-	-	2.00	4.00	259.0	113.0	1.40	80.00	TO-220 TO-220F TO-220F1 TO-263
UK4145	-	60	±20	84.00	7.0	10.0	-	-	2.00	4.00	17.0	9.0	1.50	84.00	TO-220 TO-220F TO-220F1 TO-263
-	UTT100P06*	-60	±20	-100.00	4.4	6.0	5.0	7.8	-1.00	-2.50	35.0	100.0	-1.50	-100.00	TO-220 TO-3P TO-247
UTT100N06	-	60	±20	100.00	7.0	-	10.0	-	1.00	3.00	130.0	280.0	1.50	100.00	TO-220 TO-220F1
-	UTT120P06	-60	±20	-120.00	5.5	6.9	7.0	8.8	-1.00	-3.00	160.0	240.0	-1.50	-120.00	TO-220
UTT120N06	-	60	±20	120.00	-	7.0	-	10.0	1.00	3.00	130.0	280.0	1.50	120.00	TO-220 TO-3P TO-247
UTT150N06	-	60	±20	150.00	3.2	4.0	-	-	2.50	4.50	40.0	24.0	1.30	150.00	TO-220 TO-3P TO-247

# MOSFET

## 75V/80V Trench Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mfi)				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>BSS</sub>	V <sub>GS</sub>	I <sub>D</sub>	V <sub>GS</sub> =10V		4.5V		V <sub>GS(th)</sub> (V)		T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.	MIN.	MAX.	TYP.	TYP.	MAX.	Conditions	
UTT75N75	-	75	±20	80.00	10.0	30.0	-	-	1.40	3.00	100.0	30.0	1.50	80.00	TO-220F1 TO-220 TO-263
UTT80N75	-	75	±25	80.00	10.0	12.0	-	-	2.00	4.00	25.0	30.0	1.50	80.00	TO-220
UTT20N08*	-	80	±25	20.00	48.0	60.0	-	-	2.00	4.00	105.0	35.0	1.50	20.00	TO-220
UTT25N08	-	80	±25	25.00	-	120.0	-	-	2.00	4.00	150.0	65.0	1.50	25.00	TO-220
UTT30N08	-	80	±20	30.00	32.0	40.0	-	-	2.00	4.00	60.0	66.0	1.40	30.00	TO-220F1 TO-220 TO-263
UTT40N08*	-	80	±20	40.00	13.0	16.0	-	-	2.00	4.00	52.0	10.0	1.50	40.00	TO-252
UTT75N08	-	80	±20	75.00	-	21.0	-	-	1.40	3.00	212.0	147.0	1.25	75.00	TO-220F1 TO-220 TO-263
UTT80N08	-	80	±20	80.00	-	12.0	-	-	2.10	4.00	50.0	30.0	1.30	80.00	TO-220F1 TO-220 TO-263
UTT100N08	-	80	±20	100.00	7.0	12.0	-	-	1.00	3.00	130.0	280.0	1.50	100.00	TO-220F1 TO-220 TO-263

## 100V Trench Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mfi)				V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>BSS</sub>	V <sub>GS</sub>	I <sub>D</sub>	V <sub>GS</sub> =10V		4.5V		V <sub>GS(th)</sub> (V)		T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	TYP.	MAX.	MIN.	MAX.	TYP.	TYP.	MAX.	Conditions	
UTT2N10	-	100	±20	3.50	-	700.0	-	1000.0	2.00	4.00	16.0	13.0	0.95	1.00	SOT-223
UTT4N10	-	100	±16	3.50	-	-	-	-	1.00	3.00	10.0	21.0	1.50	3.50	SOT-223
UTT6N10	-	100	±20	6.00	80.0	108.0	100.0	153.0	1.00	2.20	1.3	1.5	1.30	6.00	SOT-223
UTT6N10Z	-	100	±20	6.00	80.0	108.0	100.0	153.0	1.00	2.20	1.3	1.5	1.30	6.00	SOT-223 (ESD Protected)
UTT10N10	-	100	±25	10.00	142.0	180.0	-	-	2.00	4.00	55.0	25.0	1.50	10.00	TO-252 TO-251
-	UTT12P10	-100	±20	-12.00	-	200.0	-	-	-2.00	-4.00	73.0	57.0	-5.00	-12.00	TO-252 TO-251
UTT12N10*	-	100	±20	12.00	150.0	180.0	-	-	2.00	4.00	7.0	3.0	1.20	12.00	TO-252
UTT15N10*	-	100	±20	15.00	100.0	125.0	110.0	148.0	1.50	2.50	5.0	4.0	1.00	15.00	TO-252
-	UTT16P10	-100	±20	-16.00	-	210.0	-	-	-1.00	-3.00	25.0	36.0	-1.30	-16.00	TO-252
-	UTT18P10	-100	±20	-19.00	-	200.0	-	-	-2.00	-4.00	73.0	57.0	-5.00	-18.00	TO-252
UTT20N10	-	100	±25	20.00	-	120.0	-	-	2.00	4.00	150.0	65.0	1.50	20.00	TO-220 TO-252
-	UTT25P10	-100	±20	-25.00	-	150.0	-	-	-2.00	-4.00	165.0	165.0	-1.40	-12.50	TO-220 TO-252
UTT30N10	-	100	±20	30.00	32.0	43.0	-	-	1.00	3.00	9.0	26.0	1.25	30.00	TO-220 TO-252
UTT36N10	-	100	±20	36.00	30.0	40.0	-	-	1.00	3.00	9.0	26.0	1.25	30.00	TO-220 TO-220F TO-252
UTT50N10*	-	100	±20	50.00	15.0	18.5	-	-	2.50	5.00	10.0	8.0	1.50	15.00	TO-220
-	UTT50P10	-100	±20	-50.00	19.0	23.0	21.0	25.0	-1.00	-3.00	510.0	870.0	-1.50	-20.00	TO-220
-	UTT60P10*	-100	±20	-60.00	19.0	23.0	21.0	25.0	1.00	3.00	510.0	870.0	-1.50	-20.00	TO-220
UTT60N10	-	100	±25	60.00	18.0	24.0	-	-	2.00	4.00	200.0	95.0	1.50	30.00	TO-220
-	UTT70P10	-100	±20	-70.00	-	30.0	-	-	-1.00	-3.00	110.0	300.0	-1.50	-20.00	TO-220
UTT80N10	-	100	±20	80.00	15.0	18.0	-	-	3.50	5.50	100.0	200.0	1.25	80.00	TO-220



# MOSFET

## 55V Planar Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	V <sub>GS=10V</sub>		V <sub>GS(th)</sub> (V)		T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	MIN.	MAX.	TYP.	TYP.	MAX.	Conditions	
-	UFR9024*	-55	±20	-11.00	-	175	-2.0	-4.0	55.0	37.0	-1.60	-7.20	TO-251 TO-252
-	UF9Z24	-55	±20	-12.00	-	175	-2.0	-4.0	55.0	37.0	-1.60	-12.00	TO-251 TO-252
UFZ24N	-	55	±20	17.00	-	70	2.0	4.0	34.0	27.0	1.30	10.00	TO-251 TO-252 TO-220
-	UF9Z34	-55	±20	-17.00	-	100	-2.0	-4.0	55.0	41.0	-1.30	-10.00	TO-220
-	UF5305	-55	±20	-31.00	-	60	-2.0	-4.0	66.0	63.0	-1.40	-16.00	TO-252 TO-220
UF3205	-	55	±20	110.00	-	8	2.0	4.0	101.0	65.0	1.30	62.00	TO-220F TO-220F1 TO-220 TO-263

## 60V Planar Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	V <sub>GS=10V</sub>		V <sub>GS(th)</sub> (V)		T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	MIN.	MAX.	TYP.	TYP.	MAX.	Conditions	
2N7000	-	60	±20	0.115	1200	7500	1.0	2.5	-	-	1.50	0.115	TO-92
2N7000Z	-	60	±20	0.115	1200	7500	1.0	2.5	-	-	1.50	0.115	TO-92 (ESD Protected)
2N7002LL	-	60	±20	0.115	-	7500	1.0	2.5	-	-	1.50	0.115	SOT-23-3
2N7002	-	60	±20	0.30	-	7500	1.0	2.5	-	-	1.50	0.30	SOT-23-3
2N7002W	-	60	±20	0.30	-	13500	1.0	2.5	-	-	1.50	0.30	SOT-323
2N7002T	-	60	±20	0.30	-	13500	1.0	2.5	-	-	1.50	0.30	SOT-523
2N7002Z	-	60	±20	0.30	-	7500	1.0	2.5	-	-	1.50	0.30	SOT-23-3 (ESD Protected)
2N7002ZW	-	60	±20	0.30	-	13500	1.0	2.5	-	-	1.50	0.30	SOT-323 (ESD Protected)
2N7002ZT	-	60	±20	0.30	-	13500	1.0	2.5	-	-	1.50	0.30	SOT-523 (ESD Protected)
UMBF170	-	60	±20	0.30	2800	5000	1.0	-	-	-	1.50	0.30	SOT-23-3
MMBF170	-	60	±20	0.50	-	5000	0.8	3.0	-	-	-	-	SOT-23-3
-	UT2955	-60	±20	-1.70	145	170	-2.0	-4.0	7.6	38.0	-1.30	-1.50	SOT-223 TO-252
UF3055	-	60	±20	3.00	88	110	2.0	4.0	14.0	13.0	1.00	3.00	SOT-223 SOP-8 TO-251 TO-252 TO-220F
UTD3055	-	60	±20	12.00	100	150	2.0	4.0	34.0	18.0	1.60	12.00	SOT-223 SOP-8 TO-251 TO-252 TO-220F
-	UF2955*	-60	±20	-12.00	155	180	-2.0	-4.0	45.0	48.0	-2.50	-12.00	SOT-223 SOP-8 TO-251 TO-252 TO-220F
12N06	-	60	±20	12.00	80	100	1.0	3.0	35.0	13.0	1.50	12.00	SOP-8 TO-252 TO-220F1 TO-220 TO-263 TO-262
12N06Z	-	60	±20	12.00	80	100	1.0	3.0	35.0	13.0	1.50	12.00	SOP-8 TO-252 TO-220F1 TO-220 TO-263 TO-262 (ESD Protected)
15N06	-	60	±15	15.00	75	100	1.0	2.5	160.0	100.0	1.50	15.00	SOP-8 TO-252 TO-220F1 TO-220 TO-263 TO-262
25N06	-	60	±20	25.00	48	65	2.0	4.0	90.0	80.0	1.50	25.00	TO-251 TO-252 TO-220F1 TO-220 TO-263 TO-262
UFZ34	-	60	±20	28.00	-	42	2.0	4.0	30.0	30.0	1.30	17.00	TO-251 TO-252 TO-220
30N06	-	60	±20	30.00	32	40	2.0	4.0	96.0	84.0	1.40	30.00	TO-251 TO-252 TO-220 TO-220F TO-220F1 TO-220F2 TO-263 TO-262
50N06	-	60	±20	50.00	18	23	2.0	4.0	180.0	200.0	1.50	50.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-263 TO-262
UFZ44	-	60	±20	50.00	-	28	2.0	4.0	110.0	92.0	2.50	51.00	TO-220F1 TO-220 TO-263 TO-262
60N06	-	60	±20	60.00	14	18	2.0	4.0	11.0	15.0	1.60	60.00	TO-220F TO-220F1 TO-220 TO-263 TO-262
70N06	-	60	±20	70.00	12	15	2.0	4.0	79.0	52.0	1.40	70.00	TO-220F1 TO-220 TO-263 TO-262
URFP064	-	60	±20	70.00	-	20	2.0	4.0	190.0	190.0	1.28	70.00	TO-247
UF1010A	-	60	±20	84.00	-	12	2.0	4.0	78.0	53.0	1.30	50.00	TO-220F1 TO-220F2 TO-220 TO-263 TO-262
UF1010E	-	60	±20	84.00	-	12	2.0	4.0	78.0	53.0	1.30	50.00	TO-220F1 TO-220F2 TO-220 TO-263 TO-262
100N06*	-	60	±20	100.00	7	-	1.0	3.0	130.0	180.0	1.50	100.00	TO-220F1 TO-220 TO-263 TO-262

# MOSFET

## 75V Planar Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	V <sub>GS=10V</sub>		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.							
75N75A*	-	75	±20	80.00	9.5	11.0	2.0	4.0	100.0	30.0	1.50	80.00	TO-220F1 TO-220 TO-263
75N75	-	75	±20	80.00	9.5	11.0	2.0	4.0	100.0	30.0	1.50	80.00	TO-220F TO-220F1 TO-220 TO-263

## 80V Planar Power MOSFET



N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	V <sub>GS=10V</sub>		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.							
60N08	-	80	±25	60.00	18	24	2.0	4.0	200.0	95.0	1.50	60.00	TO-220F TO-220F1 TO-220 TO-263
70N08*	-	80	±20	70.00	14	18	2.0	4.0	50.0	30.0	1.30	70.00	TO-220F TO-220F1 TO-220 TO-263
80N08	-	80	±20	80.00	-	12	2.1	4.0	50.0	30.0	1.30	80.00	TO-220F1 TO-220 TO-263 TO-247

## 100V Planar Power MOSFET



N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (mΩ)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	V <sub>GS=10V</sub>		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.							
UT2N10	-	100	±10	2.00	-	1050.0	1.0	2.0	15.0	20.0	1.40	2.00	TO-252 TO-92 TO-92NL
6N10	-	100	±20	6.50	160.0	200.0	1.0	3.0	8.0	9.0	1.30	6.50	SOP-8 TO-251 TO-252 TO-220F TO-220 TO-262
6N10Z	-	100	±20	6.50	160.0	200.0	1.0	3.0	8.0	9.0	1.30	6.50	TO-252 (ESD Protected)
-	UF9520S	-100	±20	-6.80	-	600.0	-2.0	-4.0	29.0	25.0	-6.30	-6.80	TO-220F1
7N10	-	100	±25	7.00	280.0	350.0	2.0	4.0	24.0	19.0	1.50	7.00	SOT-223 SOP-8 TO-251 TO-252 TO-220F TO-220 TO-262
7N10Z	-	100	±25	7.00	280.0	350.0	2.0	4.0	24.0	19.0	1.50	7.00	SOP-8 TO-251 TO-252 TO-220F TO-220 TO-262 (ESD Protected)
UF520	-	100	±20	9.20	250.0	270.0	2.0	4.0	30.0	20.0	2.50	9.20	TO-220
-	12P10	-100	±30	-9.40	240.0	290.0	-2.0	-4.0	160.0	60.0	-4.00	-9.40	SOT-223 SOP-8 TO-251 TO-252 TO-220F TO-220 TO-262 TO-263
12N10	-	100	±20	12.00	150.0	180.0	1.0	3.0	7.0	3.0	1.20	12.00	SOP-8 TO-251 TO-252 TO-220F TO-220 TO-262
UT12N10	-	100	±20	12.00	150.0	180.0	2.0	4.0	7.0	3.0	1.20	12.00	SOP-8 TO-251 TO-252 TO-220F TO-220 TO-262
-	UF9530	-100	±20	-14.00	-	200.0	-2.0	-4.0	58.0	46.0	-1.60	-8.40	TO-251 TO-252 TO-220
19N10	-	100	±25	15.60	78.0	100.0	2.0	4.0	150.0	65.0	1.50	15.60	TO-251 TO-252 TO-220F TO-220 TO-262 DFN5X6-8L
19N10V	-	100	±25	15.60	78.0	100.0	1.0	3.0	150.0	65.0	1.50	15.60	TO-251 TO-252
25N10	-	100	±20	23.00	-	80.0	2.0	4.0	28.0	2.0	1.30	16.00	TO-251 TO-252 TO-220F TO-220 TO-262
-	UT23P09	-100	±20	-23.00	-	117.0	-2.0	-4.0	67.0	51.0	-1.60	-11.00	TO-220
-	UF5210	-100	±20	-40.00	-	60.0	-2.0	-4.0	86.0	81.0	-1.60	-21.00	TO-220
URFP150	-	100	±20	41.00	-	55.0	2.0	4.0	120.0	81.0	2.50	41.00	TO-247
45N10*	-	100	±20	45.00	24.0	32.0	1.0	2.5	100.0	90.0	1.50	45.00	TO-220F TO-220 TO-262 TO-263
UF3710	-	100	±20	57.00	-	23.0	2.0	4.0	58.0	47.0	1.20	28.00	TO-220F TO-220F1 TO-220 TO-263
UF540	-	100	±20	27.00	-	85.0	2.0	4.0	35.0	35.0	2.50	27.00	TO-220
UF8010	-	100	±20	80.00	12.0	15.0	2.0	4.0	130.0	120.0	1.30	80.00	TO-220F TO-220F1 TO-220

# MOSFET

## 150V Planar Power MOSFET



N-CH 	P-CH 	Maximum Ratings			R <sub>DS(on)</sub> (mΩ)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GS</sub>	I <sub>D</sub>	V <sub>GS</sub> =10V		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.							
UF5N15Z	-	150	±20	5.00	-	1900	2.0	4.0	1.6	2.9	1.43	5.00	TO-252
UF6N15Z	-	150	±20	6.00	-	1950	2.0	4.0	38.0	13.0	1.48	6.00	SOT-223
10N15	-	150	±20	10.00	-	300	2.0	4.0	165.0	90.0	1.40	5.00	TO-220F1
20N15	-	150	±20	20.00	120	130	2.0	4.0	77.0	49.0	1.50	20.00	TO-252 TO-220F1 TO-220F2
20N15V	-	150	±20	20.00	120	130	1.0	2.5	77.0	49.0	1.50	20.00	TO-220F1
40N15	-	150	±25	40.00	-	42	2.2	3.8	320.0	200.0	1.48	40.00	TO-220F2
60N15	-	150	±20	60.00	-	30	2.0	4.0	180.0	135.0	1.60	60.00	TO-247

## 200V Planar Power MOSFET



N-CH 	P-CH 	Maximum Ratings			R <sub>DS(on)</sub> (mΩ)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GS</sub>	I <sub>D</sub>	V <sub>GS</sub> =10V		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.							
UF4N20Z	-	200	±20	4.00	-	2000.0	2.0	4.0	38.0	13.0	1.48	4.00	SOT-223 TO-252
-	7P20	-200	±30	-5.70	540.0	690.0	-2.0	-4.0	110.0	42.0	-5.00	-5.70	TO-251 TO-252 TO-220F TO-220 TO-262
7N20	-	200	±25	7.00	580.0	690.0	1.0	3.0	24.0	19.0	1.50	7.00	TO-252
7N20Z	-	200	±25	7.00	580.0	690.0	2.0	4.0	24.0	19.0	1.50	7.00	TO-252 (ESD Protected)
-	UF9630*	-200	±20	-6.50	-	800.0	-2.0	-4.0	27.0	24.0	-6.50	-6.50	TO-251 TO-252 TO-220F TO-220 TO-262
UF630	-	200	±20	9.00	250.0	400.0	2.0	4.0	50.0	40.0	2.00	9.00	TO-251 TO-252 TO-220F1 TO-220F2 TO-220F TO-220 TO-262
-	UF9640	-200	±20	-11.00	-	500.0	-2.0	-4.0	43.0	38.0	-5.00	-11.00	TO-220F TO-220 TO-262
15N20	-	200	±30	15.00	180.0	230.0	3.0	5.0	133.0	62.0	1.50	15.00	TO-252 TO-220F TO-220F1 TO-220
UF640	-	200	±20	18.00	140.0	180.0	2.0	4.0	50.0	35.0	2.00	18.00	SOT-223 TO-252 TO-263 TO-220F TO-220F1 TO-220F2 TO-220
UF640V	-	200	±20	18.00	140.0	180.0	1.0	2.5	50.0	35.0	2.00	18.00	TO-220 TO-3P
22N20	-	200	±30	22.00	120.0	140.0	3.0	5.0	300.0	180.0	1.50	22.00	TO-220F TO-220F1 TO-220
25N20	-	200	±20	25.00	-	80.0	2.0	4.0	28.0	2.0	1.30	16.00	TO-220F
30N20	-	200	±30	30.00	-	75.0	3.0	5.0	280.0	115.0	1.50	30.00	TO-220F2
UF50N20	-	200	±20	50.00	-	40.0	2.0	4.0	180.0	135.0	1.60	50.00	TO-247

# MOSFET

## 250V Planar Power MOSFET

N-CH 	P-CH 	Maximum Ratings			$R_{DS(ON)}$ (°C)		$V_{GS(th)}$ (V)		Turn on/off Time		Body Diode		Package
		$V_{DSS}$	$V_{OSS}$	$I_D$	$V_{GS=10V}$		MIN.	MAX.	$T_R$ (nS)	$T_F$ (nS)	$V_{SD}$ (V)	$I_S$ (A)	
		(V)	(±V)	(A)	TYP.	MAX.							
UF3N25Z	-	250	±20	3.00	-	1.70	2.0	4.0	90.0	50.0	1.30	3.00	SOT-223 TO-251 TO-252
UF624	-	250	±20	4.40	-	1.10	2.0	4.0	13.0	12.0	1.80	4.40	TO-252
UF624Z	-	250	±20	4.40	-	1.10	2.0	4.0	13.0	12.0	1.80	4.40	TO-252 (ESD Protected)
5N25	-	250	±20	5.00	0.94	1.20	2.0	4.0	90.0	50.0	1.50	3.80	TO-252
5N25Z	-	250	±20	5.00	0.94	1.20	2.0	4.0	90.0	50.0	1.50	3.80	TO-252 (ESD Protected)
UF634	-	250	±30	8.10	-	0.45	2.0	4.0	14.0	21.0	1.50	8.10	TO-220F TO-220F1 TO-220
12N25	-	250	±20	12.00	0.34	0.50	2.0	4.0	80.0	80.0	1.40	12.00	TO-252 TO-220F TO-220F1 TO-220
12N25V	-	250	±20	12.00	0.34	0.50	1.0	2.5	80.0	80.0	1.40	12.00	TO-220
15N25	-	250	±20	15.00	0.25	0.37	2.0	4.0	85.0	90.0	1.40	15.00	TO-252
18N25	-	250	±20	18.00	0.16	0.24	2.0	4.0	130.0	100.0	1.40	18.00	TO-220F TO-220F1
UFP254	-	250	±20	23.00	-	0.14	2.0	4.0	63.0	50.0	1.80	23.00	TO-220F2
33N25	-	250	±20	33.00	0.032	0.08	2.0	4.0	230.0	120.0	1.40	33.00	TO-247
UFP264	-	250	±20	38.00	-	0.075	2.0	4.0	180.0	135.0	1.80	38.00	TO-247

## 300V Planar Power MOSFET

N-CH 	P-CH 	Maximum Ratings			$R_{DS(ON)}$ (°C)		$V_{GS(th)}$ (V)		Turn on/off Time		Body Diode		Package
		$V_{DSS}$	$V_{OSS}$	$I_D$	$V_{GS=10V}$		MIN.	MAX.	$T_R$ (nS)	$T_F$ (nS)	$V_{SD}$ (V)	$I_S$ (A)	
		(V)	(±V)	(A)	TYP.	MAX.							
UF2N30Z	-	300	±20	2.00	-	2.00	2.0	4.0	50.0	40.0	1.30	2.00	SOT-223
UF3N30Z	-	300	±20	3.00	-	2.00	2.0	4.0	50.0	40.0	1.30	0.85	TO-251 TO-252
4N30	-	300	±20	4.00	-	2.00	2.0	4.0	38.0	13.0	1.48	4.00	TO-252
4N30Z	-	300	±20	4.00	-	2.00	2.0	4.0	38.0	13.0	1.48	4.00	TO-252 (ESD Protected)
-	7P30	-300	±30	-6.00	-	1.00	-2.0	-4.5	16.0	14.0	3.40(TYP.)	-6.00	TO-220
10N30	-	300	±30	10.00	0.50	0.65	2.0	4.0	89.0	81.0	1.40	10.00	TO-251 TO-252 TO-220
12N30	-	300	±20	12.00	0.34	0.47	2.0	4.0	105.0	140.0	1.40	12.00	TO-252

# MOSFET

## 400V Planar Power MOSFET































N-CH	P-CH	Maximum Ratings			R <sub>DS(on)</sub> (†)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GS</sub>	I <sub>D</sub>	V <sub>GS</sub> =10V		V <sub>GS(th)</sub> (V)		T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	MIN.	MAX.	TYP.	TYP.	MAX.	Conditions	
1N40	-	400	±30	1.40	4.50	6.80	2.0	4.0	30.0	25.0	1.50	1.40	TO-92 SOT-223 TO-126 TO-251 TO-252 TO-262 TO-220 TO-220F TO-220F1
1N40K*	-	400	±30	1.40	4.50	6.80	2.0	4.0	14.0	26.0	1.50	1.40	TO-92 SOT-223 TO-126 TO-251 TO-252 TO-262 TO-220 TO-220F TO-220F1
1N40A	-	400	±30	1.00	4.50	6.80	3.0	5.0	20.0	17.0	1.50	1.00	TO-92 SOT-223 TO-126 TO-251 TO-252 TO-262 TO-220 TO-220F TO-220F1
2N40	-	400	±30	2.00	3.00	3.40	2.0	4.0	25.0	25.0	1.20	2.50	TO-92 TO-251 TO-252 TO-262 TO-220 TO-220F TO-220F1
2N40K-TA	-	400	±30	2.00	-	2.50	3.0	5.0	32.0	23.0	1.20	2.50	TO-92 TO-251 TO-252 TO-262 TO-220 TO-220F TO-220F1
3N40	-	400	±30	3.00	1.60	2.00	2.0	4.0	60.0	30.0	1.50	3.00	TO-251 TO-252 TO-262 TO-220 TO-220F TO-220F1
3N40K-MT	-	400	±30	3.00	-	2.00	2.5	4.5	48.0	27.0	1.50	3.00	TO-251 TO-252 TO-262 TO-220 TO-220F TO-220F1
4N40	-	400	±30	4.00	1.35	1.50	2.0	4.0	42.0	62.0	1.40	2.00	TO-251 TO-252 TO-262 TO-220 TO-220F TO-220F1
5N40	-	400	±30	5.00	1.10	1.20	2.0	4.0	46.0	48.0	1.40	5.00	TO-251 TO-252 TO-262 TO-220 TO-220F TO-220F1
6N40	-	400	±30	6.00	0.80	1.00	2.0	4.0	65.0	38.0	1.40	6.00	TO-251 TO-252 TO-262 TO-220 TO-220F TO-220F1
7N40	-	400	±30	7.00	0.75	0.90	2.0	4.0	75.0	50.0	1.50	7.00	TO-220 TO-262 TO-220F TO-220F1
8N40	-	400	±30	8.00	0.50	0.82	2.0	4.0	15.0	35.0	1.90	8.00	TO-220 TO-262 TO-220F TO-220F1
9N40	-	400	±30	9.00	0.60	0.75	2.0	4.0	60.0	140.0	1.70	9.00	TO-220 TO-262 TO-220F TO-220F1
10N40	-	400	±30	10.50	0.42	0.65	2.0	4.0	89.0	81.0	1.40	10.50	TO-220 TO-262 TO-220F TO-220F1
10N40K*	-	400	±30	10.50	0.50	0.65	2.0	4.0	25.0	10.0	1.40	10.50	TO-220 TO-262 TO-220F TO-220F1
11N40	-	400	±30	11.40	0.41	0.52	2.0	4.0	100.0	60.0	1.50	11.40	TO-220 TO-262 TO-220F TO-220F1
11N40K-MT	-	400	±30	11.40	0.37	0.52	2.5	4.5	88.0	85.0	1.50	11.40	TO-220 TO-262 TO-220F TO-220F1
12N40	-	400	±30	12.00	0.36	0.47	2.0	4.0	105.0	140.0	1.40	12.00	TO-220 TO-262 TO-220F TO-220F1
12N40K-MT	-	400	±30	12.00	-	0.47	2.5	4.5	94.0	162.0	1.40	12.00	TO-220 TO-262 TO-220F TO-220F1
13N40	-	400	±30	13.00	0.32	0.35	2.0	4.0	20.0	42.0	1.20	13.00	TO-220 TO-262 TO-220F TO-220F1
13N40K-MT	-	400	±30	13.00	0.29	0.35	2.5	4.5	87.0	89.0	1.40	13.00	TO-220F2
14N40K-MT	-	400	±30	14.00	0.26	0.34	2.5	4.5	96.0	112.0	1.40	14.00	TO-220F2
15N40	-	400	±30	15.00	0.25	0.35	2.0	4.0	55.0	40.0	1.40	15.00	TO-220 TO-220F TO-220F1
15N40K-MT	-	400	±30	15.00	0.23	0.32	2.5	4.5	108.0	124.0	1.40	15.00	TO-220F2
17N40K-MT	-	400	±30	17.00	0.18	0.24	2.5	4.0	136.0	152.0	1.50	17.00	TO-220F2
18N40	-	400	±30	18.00	0.20	0.24	2.0	4.0	22.0	22.0	1.50	18.00	TO-220 TO-220F1 TO-247 TO-3P
20N40	-	400	±30	23.00	0.16	0.20	2.0	4.0	92.0	75.0	1.50	23.00	TO-247
20N40K-MT	-	400	±30	20.00	0.15	0.22	2.5	4.5	190.0	200.0	1.50	20.00	TO-220F2
25N40	-	400	±30	25.00	0.11	0.16	2.0	4.0	100.0	66.0	1.40	26.00	TO-247
UF730	-	400	±20	5.50	0.80	1.00	2.0	4.0	20.0	15.0	1.60	5.50	TO-220 TO-220F TO-220F1 TO-262
UF740	-	400	±20	10.00	0.42	0.55	2.0	4.0	25.0	25.0	2.00	10.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262

# MOSFET

## 500V Planar Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (°C)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	V <sub>GS=10V</sub>		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.			TYP.	TYP.	MAX.	Conditions	
02N50	-	500	±30	0.20	62.00	75.00	2.5	4.5	4.0	25.0	1.00	0.20	TO-251
1N50	-	500	±30	1.30	4.60	6.00	2.0	4.0	13.0	15.0	1.15	1.30	TO-92 SOT-223 TO-126 TO-251 TO-252 TO-262 TO-220 TO-220F TO-220F1
1N50A	-	500	±20	1.00	6.80	8.00	3.0	5.0	17.0	18.0	1.15	1.00	TO-92 SOT-223 TO-126 TO-251 TO-252 TO-262 TO-220 TO-220F TO-220F1
1N50Z	-	500	±20	1.30	6.00	7.00	2.0	4.0	13.0	15.0	1.15	1.30	TO-92 SOT-223 TO-126 TO-251 TO-252 TO-262 TO-220 TO-220F TO-220F1 (ESD Protected)
2N50	-	500	±30	2.00	2.30	4.90	2.0	4.0	20.0	20.0	1.20	2.00	TO-92 SOT-223 TO-126 TO-251 TO-252 TO-220 TO-220F TO-220F1
2N50K-TA	-	500	±30	2.00	2.60	4.90	3.0	5.0	20.0	20.0	1.20	2.00	TO-92 SOT-223 TO-126 TO-251 TO-252 TO-220 TO-220F TO-220F1
3N50	-	500	±30	3.00	1.55	3.20	2.0	4.0	25.0	25.0	1.40	3.00	TO-92 SOT-223 TO-126 TO-251 TO-252 TO-220 TO-220F TO-220F1
3N50Z	-	500	±30	3.00	1.65	3.20	2.0	4.0	25.0	25.0	1.40	3.00	TO-92 SOT-223 TO-126 TO-251 TO-252 TO-220 TO-220F TO-220F1 (ESD Protected)
3N50K*	-	500	±30	3.00	2.20	3.20	2.0	4.0	20.0	10.0	1.40	3.00	TO-92 SOT-223 TO-126 TO-251 TO-252 TO-220 TO-220F TO-220F1
3N50K-MK	-	500	±30	3.00	-	3.20	2.0	4.0	20.0	10.0	1.40	3.00	TO-92 SOT-223 TO-126 TO-251 TO-252 TO-220 TO-220F TO-220F1
4N50	-	500	±30	4.00	1.60	2.20	2.0	4.0	21.0	20.0	1.60	4.00	TO-251 TO-252 TO-220 TO-220F TO-220F1
4N50K*	-	500	±30	4.00	1.60	2.20	2.0	4.0	15.0	7.0	1.60	4.00	TO-251 TO-252 TO-220 TO-220F TO-220F1
5N50	-	500	±30	5.00	1.32	1.40	2.0	4.0	30.0	28.0	1.40	5.00	TO-251 TO-252 TO-220 TO-220F TO-220F1
5N50-P	-	500	±30	5.00	1.38	1.45	2.0	4.0	30.0	28.0	1.40	5.00	TO-252
5N50K-MT	-	500	±30	5.00	1.23	1.40	3.0	5.0	50.0	44.0	1.40	5.00	TO-251 TO-252 TO-220 TO-220F TO-220F1
F5N50	-	500	±30	5.00	1.35	1.60	1.5	3.5	50.0	70.0	1.40	5.00	TO-251 TO-252 TO-220 TO-220F TO-220F1
6N50	-	500	±30	6.00	0.95	1.15	2.0	4.0	45.0	35.0	1.50	6.00	TO-251 TO-252 TO-220 TO-220F TO-220F1
6N50K*	-	500	±30	6.00	0.95	1.15	2.0	4.0	18.0	8.0	1.50	6.00	TO-251 TO-252 TO-220 TO-220F TO-220F1
7N50	-	500	±30	7.00	0.73	1.00	2.0	4.0	55.0	35.0	1.40	7.00	TO-220 TO-220F TO-220F1 TO-262 TO-252 TO-251
7N50K*	-	500	±30	7.00	0.80	1.00	2.0	4.0	18.0	8.0	1.40	7.00	TO-220 TO-220F TO-220F1 TO-262 TO-252 TO-251
8N50	-	500	±30	8.00	0.71	0.85	2.0	4.0	38.0	33.0	1.60	8.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
8N50H	-	500	±30	8.00	0.80	1.00	2.0	4.0	55.0	35.0	1.40	7.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
8N50K*	-	500	±30	8.00	0.77	0.85	2.0	4.0	20.0	12.0	1.60	8.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
9N50	-	500	±30	9.00	0.62	0.85	2.0	4.0	65.0	64.0	1.40	9.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
10N50	-	500	±30	10.00	0.60	0.68	2.0	4.0	80.0	80.0	1.40	10.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
10N50K-MT	-	500	±30	10.00	0.47	0.68	2.0	4.0	84.0	85.0	1.40	10.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
11N50	-	500	±30	11.00	0.51	0.55	2.0	4.0	70.0	75.0	1.40	11.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
11N50K-MT	-	500	±30	11.00	0.43	0.55	2.5	4.5	100.0	100.0	1.40	11.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
12N50	-	500	±30	12.00	0.43	0.54	2.0	4.0	54.0	47.0	1.50	12.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
12N50K-MT	-	500	±30	12.00	0.39	0.54	2.5	4.5	125.0	125.0	1.50	12.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
13N50	-	500	±30	13.00	0.38	0.48	2.0	4.0	140.0	85.0	1.40	13.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
13N50K	-	500	±30	13.00	0.42	0.48	2.0	4.0	40.0	15.0	1.40	13.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262

# MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (†)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	V <sub>GSS</sub> =10V		V <sub>GS(th)</sub> (V)		T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	MIN.	MAX.	TYP.	TYP.	MAX.	Conditions	
 13N50K-MT	 -	500	±30	13.00	0.35	0.41	2.5	4.5	134.0	120.0	1.40	13.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-263 TO-262
 14N50	 -	500	±30	14.00	0.41	0.46	3.0	4.5	65.0	40.0	1.60	14.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-263 TO-262
 14N50K*	 -	500	±30	14.00	0.34	0.38	3.0	4.5	40.0	15.0	1.60	14.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-263 TO-262
 15N50	 -	500	±30	15.00	0.30	0.35	2.0	4.0	85.0	40.0	1.40	15.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
 15N50K-MT	 -	500	±30	15.00	0.27	0.36	2.5	4.5	147.0	156.0	1.40	15.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
 16N50	 -	500	±30	16.00	0.31	0.38	2.0	4.0	150.0	80.0	1.40	16.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
 16N50K*	 -	500	±30	16.00	0.31	0.38	2.0	4.0	45.0	20.0	1.40	16.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
 17N50K-MT	 -	500	±30	17.00	0.22	0.30	2.5	4.5	175.0	168.0	1.50	17.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
 18N50	 -	500	±30	18.00	0.26	0.32	2.0	4.0	165.0	90.0	1.40	18.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262 TO-263 TO-3P
 18N50K*	 -	500	±30	18.00	0.24	0.32	2.0	4.0	50.0	25.0	1.40	18.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262 TO-263 TO-3P
 20N50	 -	500	±30	20.00	0.18	0.27	2.0	4.0	70.0	70.0	1.70	20.00	TO-3P
 20N50K*	 -	500	±30	20.00	0.22	0.27	2.0	4.0	50.0	25.0	1.40	20.00	TO-247 TO-3P
 24N50	 -	500	±30	24.00	0.16	0.24	2.0	4.0	250.0	155.0	1.40	24.00	TO-247 TO-3P
 26N50	 -	500	±30	26.00	0.15	0.24	2.0	4.0	200.0	280.0	1.50	26.00	TO-3P
 UF830	 -	500	±30	4.50	1.30	1.50	2.0	4.0	15.0	16.0	1.60	4.50	TO-251 TO-252 TO-220F TO-220F1 TO-220F2 TO-220 TO-262
UF830-F	-	500	±30	4.50	1.10	1.50	2.0	4.0	36.0	70.0	1.60	4.50	TO-251 TO-252 TO-220F TO-220F1 TO-220F2 TO-220 TO-262
UF830Z	-	500	±30	4.50	1.10	1.50	2.0	4.0	15.0	16.0	1.60	4.50	TO-251 TO-252 TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-220F (ESD Protected)
UF830K-MT	-	500	±30	4.50	-	1.50	2.5	4.5	48.0	44.0	1.60	4.50	TO-251 TO-251S TO-220F TO-252 TO-220F TO-220F1 TO-220F2 TO-220F3 TO-252D TO-220
UF840	-	500	±30	8.00	0.80	0.85	2.0	4.0	21.0	20.0	2.00	8.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
UK3568	-	500	±30	12.00	0.45	0.52	2.0	4.0	22.0	36.0	1.70	12.00	TO-220F TO-220F1 TO-220F2 TO-220 TO-262
UF450	-	500	±20	14.00	0.26	0.40	2.0	4.0	47.0	44.0	1.40	14.00	TO-220F TO-220F1 TO-220F2 TO-220 TO-262
UF460	-	500	±20	21.00	0.22	0.27	2.0	4.0	120.0	98.0	1.80	21.00	TO-3P TO-247

# MOSFET

## 600V Planar Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (Ω)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	V <sub>GS=10V</sub>		MIN.		T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	TYP.	TYP.	MAX.	Conditions			
1N60A	-	600	±30	0.50	12.00	15.00	2.0	4.5	11.0	18.0	1.60	1.20	SOT-223 TO-92 TO-126 TO-251 TO-252 TO-220 TO-220F TO-220F1 TO-220F2
1N60	-	600	±30	1.20	8.40	11.50	2.0	4.0	25.0	25.0	1.40	1.20	TO-92 SOT-223 TO-126 TO-251 TO-252 TO-220 TO-220F TO-220F1 TO-220F2
1N60P	-	600	±30	1.20	8.50	11.50	2.0	4.0	25.0	25.0	1.40	1.20	TO-92 SOT-223 TO-126 TO-251 TO-252 TO-220 TO-220F TO-220F1 TO-220F2
1N60Z	-	600	±20	1.20	6.40	11.50	2.0	4.0	25.0	25.0	1.40	1.20	SOT-223 TO-92 TO-126 TO-251 TO-252 TO-220 TO-220F TO-220F1 TO-220F2 (ESD Protected)
2N60L	-	600	±30	2.00	4.20	5.00	2.0	4.0	25.0	25.0	1.40	2.00	TO-92 TO-251 TO-252 TO-220 TO-220F TO-220F2 TO-262
2N60ZL	-	600	±30	2.00	4.20	5.00	2.0	4.0	55.0	70.0	1.40	2.00	TO-251 TO-220F TO-252
2N60	-	600	±30	2.00	3.60	5.00	2.0	4.0	35.0	50.0	1.40	2.00	TO-92 TO-126 TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
2N60Z	-	600	±30	2.00	3.70	5.00	2.0	4.0	40.0	50.0	1.40	2.00	TO-251 TO-220F TO-252
2N60-E	-	600	±30	2.00	4.40	5.00	2.0	4.0	35.0	40.0	1.40	2.00	TO-92 TO-126 TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
F2N60	-	600	±30	2.00	4.70	5.00	2.0	4.0	25.0	25.0	1.40	2.00	TO-252
2N60K	-	600	±30	2.00	6.00	7.00	2.0	4.0	15.0	7.0	1.40	2.00	TO-92 TO-126 TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
2N60K-MT	-	600	±30	2.00	3.90	5.00	3.0	5.0	30.0	20.0	1.40	2.00	TO-92 TO-126 TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
2N60K-TA	-	600	±30	2.00	4.00	5.00	3.0	5.0	25.0	25.0	1.40	2.00	TO-92 TO-126 TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
2N60-C	-	600	±30	2.00	3.60	4.20	2.5	4.5	15.0	7.0	1.40	2.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-220F3 TO-251 TO-252 TO-252D
3N60	-	600	±30	3.00	2.80	3.60	2.0	4.0	30.0	30.0	1.40	3.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
3N60A	-	600	±30	3.00	2.50	3.60	2.0	4.0	30.0	30.0	1.40	3.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
3N60Z	-	600	±30	3.00	2.70	3.60	2.0	4.0	30.0	30.0	1.40	3.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262 (ESD Protected)
3N60K	-	600	±30	3.00	2.60	3.60	2.0	4.0	15.0	7.0	1.40	3.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
3N60K-MK	-	600	±30	3.00	-	3.60	2.5	4.5	16.0	17.0	1.40	3.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
4N60	-	600	±30	4.00	1.90	2.50	2.0	4.0	45.0	35.0	1.40	4.40	TO-251 TO-252 TO-251S TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263 DFN-8(5X6)
4N60-C	-	600	±30	4.00	1.90	2.50	2.0	4.0	55.0	40.0	1.40	4.40	TO-251 TO-252 TO-251S TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263 DFN-8(5X6)
4N60-E	-	600	±30	4.00	2.30	2.50	2.0	4.0	60.0	70.0	1.40	4.40	TO-251 TO-252 TO-251S TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263 DFN-8(5X6)
4N60-S	-	600	±30	4.00	2.20	2.50	3.0	5.0	40.0	80.0	1.40	4.40	TO-251 TO-252 TO-251S TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263 DFN-8(5X6)
4N60-Q	-	600	±30	4.00	2.20	2.50	2.0	4.0	45.0	40.0	1.40	4.40	TO-251 TO-252 TO-251S TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263 DFN-8(5X6)
4N60-N	-	600	±30	4.00	2.10	2.50	2.0	4.0	70.0	100.0	1.40	4.40	TO-251 TO-252 TO-251S TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263 DFN-8(5X6)
4N60Z	-	600	±20	4.00	2.20	2.50	2.0	4.0	45.0	35.0	1.40	4.40	TO-251 TO-252 TO-251S TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263 DFN-8(5X6)
4N60Z-E	-	600	±20	4.00	2.20	2.50	2.0	4.0	45.0	35.0	1.40	4.40	TO-251 TO-252 TO-251S TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263 DFN-8(5X6)
4N60K	-	600	±30	4.00	1.86	2.50	2.0	4.0	18.0	8.0	1.40	4.40	TO-251 TO-252 TO-251S TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263 DFN-8(5X6)
4N60K-MT	-	600	±30	4.00	1.79	2.50	2.5	4.5	49.0	43.0	1.40	4.40	TO-251 TO-252 TO-251S TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263 DFN-8(5X6)
4N60K-MK	-	600	±30	4.00	-	2.50	2.5	4.5	38.0	30.0	1.40	4.40	TO-251 TO-252 TO-251S TO-220F TO-220F1 TO-220F2 TO-220 TO-262



# MOSFET

## 600V Planar Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(on)</sub> (Ω)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	V <sub>GS=10V</sub>		MIN.	MAX.	T <sub>r</sub> (nS)	T <sub>f</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.			TYP.	TYP.	MAX.	Conditions	
5N60	-	600	±30	5.00	1.85	2.20	2.0	4.0	42.0	46.0	1.40	5.00	TO-252 TO-220F TO-220F1 TO-220 TO-262 TO-220F2 TO-251
5N60Z	-	600	±20	5.00	1.46	2.20	2.0	4.0	42.0	46.0	1.40	5.00	TO-220F1
5N60K*	-	600	±30	5.00	1.78	2.20	2.0	4.0	20.0	11.0	1.40	5.00	TO-252 TO-220F TO-220F1 TO-220 TO-262
6N60	-	600	±30	6.20	1.20	1.50	2.0	4.0	70.0	45.0	1.40	6.20	TO-252 TO-220F TO-220F1 TO-220F2 TO-220 TO-262
6N60-P	-	600	±30	6.20	1.30	1.75	2.0	4.0	70.0	45.0	1.40	6.20	TO-251 TO-252 TO-220F TO-220F1 TO-220F2 TO-220 TO-263
6N60Z	-	600	±30	6.20	1.40	1.75	2.0	4.0	70.0	45.0	1.40	6.20	TO-252 TO-220F TO-220F1 TO-220F2 TO-220 TO-262 (ESD Protected)
6N60K*	-	600	±30	6.00	0.90	1.25	2.0	4.0	20.0	12.0	1.40	6.20	TO-252 TO-220F TO-220F1 TO-220 TO-262
7N60A	-	600	±30	7.00	0.93	1.20	2.0	4.0	60.0	65.0	1.40	7.00	TO-252 TO-220F TO-220F1 TO-220F2 TO-220 TO-262
7N60	-	600	±30	7.40	0.83	1.00	2.0	4.0	70.0	60.0	1.40	7.40	TO-220F TO-220F1 TO-220F TO-220 TO-262 TO-263
7N60-Q	-	600	±30	7.40	0.96	1.20	2.0	4.0	90.0	155.0	1.40	7.40	TO-220F TO-220F1 TO-220F TO-220 TO-262 TO-264
7N60-F	-	600	±30	7.40	1.10	1.20	2.0	4.0	240.0	300.0	1.40	7.40	TO-220F TO-220F1 TO-220F TO-220 TO-262 TO-265
7N60-M	-	600	±30	7.40	1.00	1.20	2.0	4.0	135.0	160.0	1.40	7.40	TO-220F TO-220F1 TO-220F TO-220 TO-262 TO-266
7N60-R	-	600	±30	7.40	0.91	1.20	2.0	4.0	110.0	180.0	1.40	7.40	TO-220F TO-220F1 TO-220F TO-220 TO-262 TO-267
7N60Z	-	600	±30	7.40	0.84	1.00	2.0	4.0	70.0	60.0	1.40	7.40	TO-220F TO-220F1 TO-220 TO-262 (ESD Protected)
7N60K	-	600	±30	7.40	1.00	1.20	2.0	4.0	25.0	10.0	1.40	7.40	TO-220F TO-220F1 TO-220 TO-263
7N60K-MT	-	600	±30	6.20	-	1.40	3.0	5.0	66.0	64.0	1.40	6.20	TO-220F TO-220F1 TO-220 TO-263
8N60	-	600	±30	8.00	1.00	1.20	2.0	4.0	60.5	64.5	1.40	8.00	TO-220F TO-220F1 TO-220 TO-262
8N60-E	-	600	±30	8.00	1.10	1.20	2.0	4.0	80.0	60.0	1.40	8.00	TO-220F TO-220F1 TO-220 TO-262
8N60K*	-	600	±30	8.00	1.00	1.20	2.0	4.0	25.0	10.0	1.40	8.00	TO-220F TO-220F1 TO-220 TO-262
8N60K-MT	-	600	±30	8.00	-	1.20	3.0	5.0	89.0	64.0	1.40	8.00	TO-220F TO-220F1 TO-220 TO-262
9N60*	-	600	±30	9.00	0.85	1.05	2.0	4.0	65.0	75.0	1.40	9.00	TO-220F TO-220F1 TO-220 TO-262
9N60K*	-	600	±30	9.00	0.85	1.05	2.0	4.0	25.0	12.0	1.40	9.00	TO-220F TO-220F1 TO-220 TO-262
10N60	-	600	±30	10.00	0.68	0.75	2.0	4.0	69.0	77.0	1.40	10.00	TO-220F1 TO-220F2 TO-220 TO-263
10N60K	-	600	±30	10.00	0.80	1.20	2.0	4.0	22.0	15.0	1.40	10.00	TO-220F TO-220F1 TO-220F2 TO-220 TO-263
10N60K-MT	-	600	±30	10.00	0.63	-	3.0	5.0	84.0	95.0	1.40	10.00	TO-220F TO-220F1 TO-220F2 TO-220 TO-263
10N60Z	-	600	±20	10.00	0.68	0.75	2.0	4.0	69.0	77.0	1.40	10.00	TO-220F TO-220F1 TO-220F2 TO-220 TO-263
10N60Z-Q	-	600	±20	10.00	0.70	0.80	2.0	4.0	110.0	160.0	1.40	10.00	TO-220F TO-220F1 TO-220F2 TO-220 TO-263
11N60K-MT	-	600	±30	11.00	0.61	1.00	2.5	4.5	95.0	96.0	1.40	11.00	TO-220F2
12N60	-	600	±30	12.00	0.60	0.80	2.0	4.0	115.0	85.0	1.40	12.00	TO-220F1 TO-220F TO-220 TO-262 TO-3P
12N60K*	-	600	±30	12.00	0.60	0.80	2.0	4.0	30.0	8.0	1.40	12.00	TO-220F1 TO-220F TO-220 TO-262 TO-3P
12N60K-MT	-	600	±30	12.00	0.54	0.74	2.0	4.0	125.0	127.0	1.40	12.00	TO-220F2

# MOSFET

## 600V Planar Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (Ω)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	V <sub>GS=10V</sub>		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.					MAX.	Conditions	
15N60	-	600	±30	15.00	0.45	0.65	2.0	4.0	125.0	65.0	1.40	15.00	TO-3P TO-220F1 TO-247
15N60K*	-	600	±30	15.00	0.50	0.65	2.0	4.0	37.0	8.0	1.40	15.00	TO-3P TO-220F1 TO-247
18N60	-	600	±30	18.00	0.41	0.50	2.0	4.0	60.0	60.0	1.50	18.00	TO-3P TO-247
18N60K*	-	600	±30	18.00	0.36	0.50	2.0	4.0	40.0	10.0	1.50	18.00	TO-3P TO-247
20N60	-	600	±30	20.00	0.32	0.45	2.0	4.0	70.0	80.0	1.50	20.00	TO-3P TO-247 TO-220F
20N60K*	-	600	±30	20.00	0.32	0.45	2.0	4.0	40.0	12.0	1.50	20.00	TO-3P TO-247 TO-220F
22N60	-	600	±30	22.00	0.25	0.35	2.0	4.0	99.0	37.0	1.50	22.00	TO-3P TO-247
22N60K*	-	600	±30	22.00	0.26	0.35	2.0	4.0	50.0	15.0	1.50	22.00	TO-3P TO-247
BSS127	-	600	±20	0.021	310.00	500.00	1.4	2.6	9.7	115.0	1.20	0.016	SOT-23 SOT-23-3
UF601	-	600	±20	0.185	300.00	700.00	-2.7	-1.5	9.0	84.0	1.40	0.003	SOT-23
UF601Q	-	600	±20	0.185	300.00	700.00	-2.7	-1.5	20.0	280.0	1.40	0.003	SOT-23 SOT-23-3
UK2996	-	600	±30	10.00	0.74	1.00	2.0	4.0	15.0	27.0	1.70	10.00	TO-220F1 TO-220F2 TO-220 TO-262

## 650V Planar Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (Ω)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	V <sub>GS=10V</sub>		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.					MAX.	Conditions	
1N65A	-	650	±30	0.50	12.00	15.50	2.0	4.5	11.0	18.0	1.60	1.20	TO-92 SOT-223 TO-126 TO-251 TO-252
1N65	-	650	±30	1.20	9.50	12.50	2.0	4.0	20.0	30.0	1.40	1.20	TO-92 SOT-223 TO-126 TO-251 TO-252 TO-220F
2N65	-	650	±30	2.00	4.20	5.00	2.0	4.0	35.0	55.0	1.40	2.00	TO-92 TO-251 TO-252 TO-220F TO-220 TO-262 TO-126
2N65L	-	650	±30	2.00	4.75	5.00	2.0	4.0	40.0	35.0	1.40	2.00	TO-92 TO-251 TO-252 TO-220F TO-220 TO-262
2N65Z	-	650	±30	2.00	3.80	5.00	2.0	4.0	40.0	50.0	1.40	2.00	TO-92 TO-251 TO-252 TO-220F TO-220 TO-262 (ESD Protected)
2N65ZL	-	650	±20	2.00	2.90	5.00	2.0	4.0	40.0	50.0	1.40	2.00	TO-251
2N65K	-	650	±30	2.00	5.00	6.00	2.0	5.0	15.0	7.0	1.40	2.00	TO-92 TO-251 TO-252 TO-220F TO-220 TO-262
2N65K-MT	-	650	±30	2.00	3.70	5.00	3.0	5.0	40.0	22.0	1.40	2.00	TO-251S TO-252 TO-220 TO-220F TO-220F1 TO-220F2
3N65A	-	650	±30	3.00	3.00	3.80	2.0	4.0	30.0	30.0	1.40	3.00	TO-252 TO-251 TO-252 TO-220F TO-220F1 TO-220F2
3N65	-	650	±30	3.00	3.00	3.80	2.0	4.0	30.0	30.0	1.40	3.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
3N65Z	-	650	±30	3.00	3.10	3.80	2.0	4.0	30.0	30.0	1.40	3.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262 (ESD Protected)
3N65K	-	650	±30	3.00	2.60	3.80	2.0	4.0	18.0	8.0	1.40	3.00	TO-251 TO-252 TO-220F TO-220 TO-262
3N65K-MK	-	650	±30	3.00	-	4.00	2.5	4.5	20.0	22.0	1.40	3.00	TO-251 TO-252 TO-220F TO-220 TO-262



# MOSFET

## 650V Planar Power MOSFET

N-CH 	P-CH 	Maximum Ratings			R <sub>DS(on)</sub> (Ω)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GS</sub>	I <sub>D</sub>	V <sub>GS</sub> =10V		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.					MAX.	Conditions	
4N65	-	650	±30	4.00	2.40	2.50	2.0	4.0	45.0	35.0	1.40	4.40	TO-251 TO-252 TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263 TO-251S DFN-8(3*3)
4N65-E	-	650	±30	4.00	2.30	2.50	2.0	4.0	60.0	70.0	1.40	4.40	TO-251 TO-252 TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263 TO-251S DFN-8(3*3)
4N65-Q	-	650	±30	4.00	2.90	3.10	2.0	4.0	45.0	35.0	1.40	4.40	TO-251 TO-252 TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263 TO-251S DFN-8(3*3)
4N65-N	-	650	±30	4.00	2.60	3.10	2.0	4.0	100.0	140.0	1.40	4.40	TO-251 TO-252 TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263 TO-251S DFN-8(3*3)
4N65Z	-	650	±30	4.00	1.90	2.50	2.0	4.0	45.0	25.0	1.40	4.40	TO-251 TO-252 TO-220F TO-220F1 TO-220F2 TO-220 TO-262 (ESD Protected)
4N65Z-E	-	650	±20	4.00	2.60	3.10	2.0	4.0	275.0	325.0	1.40	4.40	TO-252
4N65K	-	650	±30	4.00	2.25	2.50	2.0	4.0	18.0	8.0	1.40	4.40	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
4N65K-MT	-	650	±30	4.00	1.77	2.50	2.5	4.5	50.0	45.0	1.40	4.40	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
4N65K-MK	-	650	±30	4.00	-	3.10	2.5	4.5	40.0	32.0	1.40	4.40	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
5N65	-	650	±30	5.00	2.20	2.40	2.0	4.0	42.0	46.0	1.40	5.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
5N65K*	-	650	±30	5.00	2.00	2.40	2.0	4.0	20.0	12.0	1.40	5.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
5N65Z	-	650	±20	5.00	1.70	2.40	2.0	4.0	42.0	46.0	1.40	5.00	TO-220F1
6N65	-	650	±30	6.20	1.15	1.70	2.0	4.0	50.0	55.0	1.40	6.20	TO-220F TO-220F1 TO-220 TO-262 TO-252 TO-251
6N65-P	-	650	±30	6.00	1.41	1.75	2.0	4.0	40.0	60.0	1.40	6.00	TO-220F TO-220F1 TO-220 TO-262 TO-252 TO-251
6N65Z-Q	-	650	±20	6.00	1.75	2.00	2.0	4.0	55.0	70.0	1.40	6.00	TO-220F
6N65Z	-	650	±20	6.00	1.65	1.85	2.0	4.0	50.0	55.0	1.40	6.00	TO-220F TO-220F1 TO-220 TO-262 (ESD Protected)
6N65K	-	650	±30	6.00	1.10	1.70	2.0	4.0	65.0	55.0	1.40	6.00	TO-220F1 TO-220F2 TO-220F3 TO-262
6N65K-MT	-	650	±30	6.00	-	1.50	2.0	4.0	65.0	55.0	1.40	6.00	TO-220F TO-220F1 TO-220F2 TO-220F3 TO-220 TO-251 TO-252
7N65A	-	650	±30	7.00	1.05	1.40	2.0	4.0	60.0	65.0	1.40	7.00	TO-220F TO-220F1 TO-220 TO-262
7N65	-	650	±30	7.40	0.94	1.20	2.0	4.0	60.0	65.0	1.40	7.40	TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263
7N65-F	-	650	±30	7.40	0.94	1.20	2.0	4.0	60.0	65.0	1.40	7.40	TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263
7N65-M	-	650	±30	7.40	0.94	1.20	2.0	4.0	60.0	65.0	1.40	7.40	TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263
7N65-Q*	-	650	±30	7.40	0.94	1.20	2.0	4.0	60.0	65.0	1.40	7.40	TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263
7N65-R	-	650	±30	7.40	0.96	1.20	2.0	4.0	60.0	65.0	1.40	7.40	TO-220F TO-220F1 TO-220F2 TO-220 TO-262 TO-263
7N65Z	-	650	±30	7.40	0.94	1.20	2.0	4.0	60.0	65.0	1.40	7.40	TO-220F TO-220F1 TO-220 TO-262 (ESD Protected)
7N65K	-	650	±30	7.40	1.26	1.40	2.0	4.0	25.0	12.0	1.40	7.40	TO-220F TO-220F1 TO-220F2 TO-220 TO-262
7N65K-MT	-	650	±30	7.00	-	1.40	2.0	4.0	65.0	55.0	1.40	7.00	TO-220F TO-220F1 TO-220F2 TO-220F3 TO-220 TO-251 TO-252

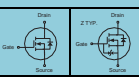
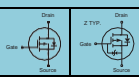
# MOSFET

## 650V Planar Power MOSFET

N-CH 	P-CH 	Maximum Ratings			$R_{DS(ON)}$ ( $\Omega$ )		$V_{GS(th)}$ (V)		Turn on/off Time		Body Diode		Package
		$V_{DSS}$	$V_{OSS}$	$I_D$	$V_{GS=10V}$				$T_R$ (nS)	$T_F$ (nS)	$V_{SD}$ (V)	$I_S$ (A)	
		(V)	( $\pm V$ )	(A)	TYP.	MAX.	MIN.	MAX.	TYP.	TYP.	MAX.	Conditions	
8N65	-	650	$\pm 30$	8.00	1.20	1.40	2.0	4.0	60.5	64.5	1.40	8.00	TO-220F TO-220F1 TO-220 TO-262
8N65K-MT	-	650	$\pm 30$	8.00	0.90	1.40	2.0	4.0	62.0	70.0	1.40	8.00	TO-220F2
9N65	-	650	$\pm 30$	9.00	0.95	1.10	2.0	4.0	40.0	45.0	1.50	9.00	TO-220F TO-220F1 TO-220
9N65K*	-	650	$\pm 30$	9.00	0.85	1.10	2.0	4.0	25.0	18.0	1.50	9.00	TO-220F TO-220F1 TO-220
10N65	-	650	$\pm 30$	10.00	0.72	0.86	2.0	4.0	69.0	77.0	1.40	10.00	TO-220F TO-220F1 TO-220
10N65T	-	650	$\pm 30$	10.00	0.87	0.95	2.0	4.0	69.0	77.0	1.40	10.00	TO-220F
10N65Z	-	650	$\pm 20$	10.00	0.87	0.95	2.0	4.0	69.0	77.0	1.40	10.00	TO-220F TO-220F1 TO-220
10N65-C	-	650	$\pm 30$	10.00	0.60	0.80	2.0	4.0	128.0	115.0	1.40	10.00	TO-220F TO-220F1 TO-220
10N65Z-Q	-	650	$\pm 30$	10.00	0.86	0.95	2.0	4.0	65.0	95.0	1.40	10.00	TO-220F TO-220F1 TO-220
10N65K	-	650	$\pm 30$	10.00	1.10	1.20	2.0	4.0	30.0	18.0	1.40	10.00	TO-220F TO-220F1 TO-220
12N65K-MT	-	650	$\pm 30$	12.00	0.56	0.76	2.0	4.0	118.0	119.0	1.40	12.00	TO-220F2
14N65K-MT	-	650	$\pm 30$	14.00	0.43	0.63	2.5	4.5	116.0	145.0	1.40	14.00	TO-220F2
15N65	-	650	$\pm 30$	15.00	0.50	0.65	2.0	4.0	125.0	65.0	1.40	15.00	TO-220F2 TO-247 TO-3P
15N65K*	-	650	$\pm 30$	15.00	0.50	0.65	2.0	4.0	35.0	20.0	1.40	15.00	TO-220F2 TO-247 TO-3P
16N65K-MT	-	650	$\pm 30$	16.00	0.35	0.54	2.5	4.5	186.0	186.0	1.40	16.00	TO-220F2 TO-247 TO-3P
18N65	-	650	$\pm 30$	18.00	0.36	0.50	2.0	4.0	60.0	60.0	1.50	18.00	TO-3P TO-247
18N65K*	-	650	$\pm 30$	18.00	0.36	0.50	2.0	4.0	40.0	12.0	1.50	18.00	TO-3P TO-247
20N65	-	650	$\pm 30$	20.00	0.32	0.45	2.0	4.0	43.0	40.0	1.50	20.00	TO-3P TO-247
22N65	-	650	$\pm 30$	22.00	0.30	0.35	2.0	4.0	99.0	37.0	1.50	22.00	TO-3P TO-247

# MOSFET

## 700V Planar Power MOSFET

N-CH 	P-CH 	Maximum Ratings			$R_{DS(ON)}$ ( $\Omega$ )		$V_{GS(th)}$ (V)		Turn on/off Time		Body Diode		Package
		$V_{DSS}$	$V_{GSS}$	$I_D$	$V_{GS}=10V$				$T_R$ (nS)	$T_F$ (nS)	$V_{SD}$ (V)	$I_S$ (A)	
		(V)	( $\pm V$ )	(A)	TYP.	MAX.	MIN.	MAX.	TYP.	TYP.	MAX.	Conditions	
1N70	-	700	$\pm 30$	1.2	10.50	13.50	2.0	4.0	11.0	20.0	1.40	1.20	TO-92 SOT-223 TO-126 TO-251 TO-252
1N70Z	-	700	$\pm 20$	1.2	9.00	13.50	2.0	4.0	25.0	25.0	1.40	1.20	TO-92 SOT-223 TO-126 TO-251 TO-252 (ESD Protected)
2N70	-	700	$\pm 30$	2.00	4.65	6.30	2.0	4.0	25.0	25.0	1.40	2.00	TO-92 TO-251 TO-252 TO-220F TO-220 TO-262
2N70L*	-	700	$\pm 30$	2.00	5.60	6.30	2.0	4.0	45.0	55.0	1.40	2.00	TO-251
2N70Z	-	700	$\pm 30$	2.00	4.50	6.30	2.0	4.0	25.0	25.0	1.40	2.00	TO-92 TO-251 TO-252 TO-220F TO-220 TO-262 (ESD Protected)
2N70ZL	-	700	$\pm 30$	2.00	5.50	6.30	2.0	4.0	25.0	25.0	1.40	2.00	TO-92 TO-251 TO-252 TO-220F TO-220 TO-262 (ESD Protected)
2N70K*	-	700	$\pm 30$	2.00	5.00	6.30	2.0	4.0	16.0	8.0	1.40	2.00	TO-92 TO-251 TO-252 TO-220F TO-220 TO-262
2N70-M	-	700	$\pm 30$	2.00	5.40	6.30	2.0	4.0	65.0	50.0	1.40	2.00	TO-92 TO-251 TO-252 TO-220F TO-220 TO-262
2N70K-MT	-	700	$\pm 30$	2.00	-	5.50	2.5	4.5	38.5	21.0	1.40	2.00	TO-92 TO-251 TO-252 TO-220F TO-220 TO-262
3N70	-	700	$\pm 30$	3.00	2.90	4.00	2.0	4.0	30.0	30.0	1.40	3.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
3N70A	-	700	$\pm 30$	3.00	3.80	4.00	2.0	4.0	30.0	30.0	1.40	3.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
3N70K*	-	700	$\pm 30$	3.00	3.20	4.00	2.0	4.0	20.0	10.0	1.40	3.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
3N70K-MK	-	700	$\pm 30$	3.00	-	4.20	2.5	4.5	14.0	14.0	1.40	3.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
3N70K-MT	-	700	$\pm 30$	3.00	-	4.00	2.5	4.5	26.0	40.0	1.40	3.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
4N70	-	700	$\pm 30$	4.40	2.40	2.80	2.0	4.0	45.0	35.0	1.40	4.40	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
4N70K	-	700	$\pm 30$	4.40	2.60	2.80	2.0	4.0	20.0	10.0	1.40	4.40	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
4N70-C	-	700	$\pm 30$	4.00	2.60	2.80	2.0	4.0	30.0	39.0	1.40	4.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
4N70-S	-	700	$\pm 30$	4.00	-	3.20	2.0	4.0	18.0	15.0	1.40	4.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
4N70Z-E	-	700	$\pm 30$	4.40	2.60	2.80	2.0	4.0	45.0	35.0	1.40	4.40	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
4N70K-MK	-	700	$\pm 30$	4.40	-	3.20	2.5	4.5	45.0	90.0	1.40	4.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
5N70*	-	700	$\pm 30$	5.00	2.00	2.40	2.0	4.0	42.0	46.0	1.40	5.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
5N70K	-	700	$\pm 30$	5.00	2.00	2.40	2.0	4.0	25.0	15.0	1.40	5.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
5N70K-MT	-	700	$\pm 30$	5.00	1.86	2.40	2.0	4.0	40.0	52.0	1.40	5.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
5N70Z	-	700	$\pm 20$	5.00	2.15	2.50	2.0	4.0	42.0	46.0	1.40	5.00	TO-220F1 TO-251

# MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (Ω)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	V <sub>GS=10V</sub>		V <sub>GS(th)</sub> (V)		T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	MIN.	MAX.	TYP.	TYP.	MAX.	Conditions	
6N70K-MT	-	700	±30	6.00	1.35	1.60	2.0	4.0	60.0	54.0	1.40	6.00	TO-220F TO-220F1 TO-220F2 TO-261
6N70-P	-	700	±30	6.00	1.60	1.80	2.0	4.0	48.0	60.0	1.40	6.00	TO-220F TO-220F1 TO-220 TO-262
6N70Z	-	700	±30	6.00	1.60	1.80	2.0	4.0	48.0	60.0	1.40	6.00	TO-220F TO-220F1 TO-220 TO-262
6N70K*	-	700	±30	6.20	1.60	1.80	2.0	4.0	25.0	15.0	1.40	6.20	TO-220F TO-220F1 TO-220 TO-262
6N70-C	-	700	±30	6.00	1.50	1.80	2.0	4.0	50.0	50.0	1.40	6.00	TO-220F TO-220F2 TO-251 TO-251S
7N70	-	700	±30	7.00	1.10	1.60	2.0	4.0	79.0	52.0	1.40	7.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
7N70K*	-	700	±30	7.40	1.40	1.60	2.0	4.0	25.0	18.0	1.40	7.40	TO-220F TO-220F1 TO-220F2 TO-220 TO-262
8N70	-	700	±30	8.00	1.30	1.40	2.0	4.0	69.0	77.0	1.40	8.00	TO-220F TO-220F1 TO-220 TO-262
8N70K*	-	700	±30	8.00	1.20	1.40	2.0	4.0	25.0	20.0	1.40	8.00	TO-220F TO-220F1 TO-220 TO-262
8N70K-MT	-	700	±30	8.00	-	1.40	3.0	5.0	85.0	60.0	1.40	8.00	TO-220F TO-220F1 TO-220 TO-262
9N70	-	700	±30	9.00	1.25	1.35	2.0	4.0	75.0	75.0	1.50	9.00	TO-220F1 TO-220F TO-220
9N70K*	-	700	±30	9.00	1.10	1.25	2.0	4.0	28.0	20.0	1.50	9.00	TO-220F1 TO-220F TO-220
10N70	-	700	±30	10.00	1.00	1.20	2.0	4.0	69.0	77.0	1.40	10.00	TO-220F1 TO-220 TO-262 TO-3P
10N70K	-	700	±30	10.00	0.90	1.20	2.0	4.0	30.0	22.0	1.40	10.00	TO-220F TO-220F1 TO-220
10N70-C	-	700	±30	10.00	0.75	0.86	2.0	4.0	132.0	121.0	1.40	10.00	TO-220F TO-220F1 TO-220
12N70	-	700	±30	12.00	0.74	1.00	2.0	4.0	115.0	85.0	1.40	12.00	TO-220F1 TO-220 TO-262 TO-247
12N70K*	-	700	±30	12.00	0.70	1.00	2.0	4.0	35.0	30.0	1.40	12.00	TO-220F TO-220F1 TO-220
12N70K-MT	-	700	±30	12.00	0.70	0.83	3.0	5.0	122.0	102.0	1.40	12.00	TO-220F TO-220F1 TO-220
15N70	-	700	±30	15.00	0.43	0.56	2.0	4.0	125.0	85.0	1.40	15.00	TO-3P
15N70K*	-	700	±30	15.00	0.43	0.56	2.0	4.0	38.0	33.0	1.40	15.00	TO-3P

## 750V Planar Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(ON)</sub> (Ω)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	V <sub>GS=10V</sub>		V <sub>GS(th)</sub> (V)		T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.	MIN.	MAX.	TYP.	TYP.	MAX.	Conditions	
7N75	-	750	±30	7.00	1.30	1.70	2.0	4.0	79.0	52.0	1.40	7.00	TO-220 TO-220F TO-220F1
7N75K*	-	750	±30	7.00	1.35	1.70	2.0	4.0	25.0	20.0	1.40	7.00	TO-220 TO-220F TO-220F1
10N75*	-	750	±30	10.00	0.85	1.10	3.0	5.0	130.0	80.0	1.40	10.00	TO-220 TO-220F TO-220F1
10N75K*	-	750	±30	10.00	0.93	1.10	3.0	5.0	35.0	30.0	1.40	10.00	TO-220 TO-220F TO-220F1

# MOSFET

## 800V Planar PowerMOSFET

N-CH	P-CH	Maximum Ratings			$R_{DS(ON)}$ ( $\Omega$ )		$V_{GS(th)}$ (V)		Turn on/off Time		Body Diode		Package
		$V_{DSS}$	$V_{GSS}$	$I_D$	$V_{GS=10V}$				$T_R$ (nS)	$T_F$ (nS)	$V_{SD}$ (V)	$I_S$ (A)	
		(V)	( $\pm V$ )	(A)	TYP.	MAX.	MIN.	MAX.	TYP.	TYP.	MAX.	Conditions	
1N80	-	800	$\pm 30$	1.00	10.00	13.50	3.0	5.0	25.0	25.0	1.40	1.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
2N80	-	800	$\pm 30$	2.40	4.30	6.30	3.0	5.0	30.0	28.0	1.40	2.40	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
2N80Z	-	800	$\pm 20$	2.40	3.80	6.30	3.0	5.0	48.0	45.0	1.40	2.40	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
3N80	-	800	$\pm 30$	3.00	3.80	4.20	3.0	4.5	27.0	40.0	1.60	3.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
4N80	-	800	$\pm 30$	4.00	2.10	3.00	3.0	5.0	45.0	35.0	1.40	4.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
4N80-N	-	800	$\pm 30$	4.00	2.58	3.00	3.0	5.0	110.0	70.0	1.40	4.00	TO-251 TO-252
5N80	-	800	$\pm 30$	5.50	1.80	2.50	3.0	5.0	85.0	30.0	2.00	5.50	TO-220F TO-220F1 TO-220 TO-262
5N80-Q*	-	800	$\pm 30$	5.50	1.95	2.50	3.0	5.0	85.0	30.0	2.00	5.50	TO-220F TO-220F1 TO-220 TO-262
6N80	-	800	$\pm 30$	6.00	1.60	2.00	3.0	5.0	95.0	65.0	1.40	6.00	TO-220 TO-220F TO-220F1 TO-262 TO-3P
6N80K*	-	800	$\pm 30$	6.00	1.60	2.00	3.0	5.0	25.0	65.0	1.40	6.00	TO-220 TO-220F TO-220F1 TO-262 TO-3P
7N80	-	800	$\pm 30$	7.00	1.40	1.80	3.0	5.0	100.0	60.0	1.40	6.60	TO-220 TO-220F TO-220F1 TO-220F2 TO-262 TO-263 TO-3P
7N80Z	-	800	$\pm 20$	7.00	1.33	1.80	3.0	5.0	115.0	100.0	1.40	6.60	TO-220 TO-220F TO-220F1 TO-220F2 TO-262 TO-263 TO-3P
7N80K*	-	800	$\pm 30$	7.00	1.40	1.80	3.0	5.0	35.0	50.0	1.40	6.60	TO-220 TO-220F TO-220F1 TO-220F2 TO-262 TO-263 TO-3P
8N80	-	800	$\pm 30$	8.00	1.30	1.45	3.0	5.0	110.0	70.0	1.40	8.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262
9N80	-	800	$\pm 30$	9.00	1.05	1.30	3.0	5.0	37.0	42.0	1.40	9.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262 TO-3P
9N80K*	-	800	$\pm 30$	9.00	1.05	1.30	3.0	5.0	25.0	25.0	1.40	9.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-262 TO-3P
10N80	-	800	$\pm 30$	10.00	0.78	1.10	3.0	5.0	130.0	80.0	1.40	10.00	TO-220 TO-220F TO-220F1 TO-220F2 TO-3P TO-247
12N80	-	800	$\pm 30$	12.00	0.78	0.90	3.0	5.0	12.0	18.0	1.40	12.00	TO-3P TO-247

## 900V Planar PowerMOSFET

N-CH	P-CH	Maximum Ratings			$R_{DS(ON)}$ ( $\Omega$ )		$V_{GS(th)}$ (V)		Turn on/off Time		Body Diode		Package
		$V_{DSS}$	$V_{GSS}$	$I_D$	$V_{GS=10V}$				$T_R$ (nS)	$T_F$ (nS)	$V_{SD}$ (V)	$I_S$ (A)	
		(V)	( $\pm V$ )	(A)	TYP.	MAX.	MIN.	MAX.	TYP.	TYP.	MAX.	Conditions	
1N90	-	900	$\pm 30$	1.00	12.10	16.00	3.0	5.0	25.0	25.0	1.40	1.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
1N90K*	-	900	$\pm 30$	1.00	10.30	16.00	3.0	5.0	25.0	30.0	1.40	1.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
2N90	-	900	$\pm 30$	2.20	5.60	7.20	3.0	5.0	35.0	30.0	1.40	2.20	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
2N90Z	-	900	$\pm 20$	2.20	5.20	7.20	3.0	5.0	48.0	46.0	1.40	2.20	TO-220F
2N90K*	-	900	$\pm 30$	2.20	5.60	7.20	3.0	5.0	20.0	30.0	1.40	2.20	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262

# MOSFET

## 900V Planar Power MOSFET

N-CH	P-CH	Maximum Ratings			R <sub>DS(on)</sub> (Ω)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	V <sub>GS=10V</sub>		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.			TYP.	TYP.	MAX.	Conditions	
3N90-E	-	900	±30	3.00	5.00	6.20	3.0	5.0	56.0	52.0	1.60	3.00	TO-251 TO-252 TO-220F TO-220F1 TO-220 TO-262
4N90	-	900	±30	4.00	2.30	4.20	3.0	5.0	50.0	35.0	1.40	4.00	TO-220F TO-220F1 TO-220 TO-252 TO-262
4N90K*	-	900	±30	4.00	3.50	4.20	3.0	5.0	20.0	45.0	1.40	4.00	TO-220F TO-220F1 TO-220 TO-252 TO-262
5N90	-	900	±30	5.00	1.85	2.80	3.0	5.0	65.0	50.0	1.40	5.00	TO-220F1 TO-220 TO-262 TO-3P
5N90K*	-	900	±30	5.00	2.25	2.80	3.0	5.0	30.0	60.0	1.40	5.00	TO-220F1 TO-220 TO-262 TO-3P
6N90	-	900	±30	6.20	1.85	2.30	3.0	5.0	90.0	60.0	1.40	6.20	TO-220F1 TO-220 TO-262
6N90Z	-	900	±20	6.20	1.70	2.30	3.0	5.0	110.0	130.0	1.40	6.20	TO-220F1 TO-220 TO-262
6N90K*	-	900	±30	6.20	1.85	2.30	3.0	5.0	25.0	60.0	1.40	6.20	TO-220F1 TO-220 TO-262
7N90	-	900	±30	7.00	1.60	1.80	3.0	5.0	80.0	55.0	1.40	7.00	TO-220F1 TO-220 TO-262 TO-3P
7N90K*	-	900	±30	7.00	1.50	1.80	3.0	5.0	25.0	20.0	1.40	7.00	TO-220F1 TO-220 TO-262 TO-3P
8N90	-	900	±30	8.00	1.25	1.55	3.0	5.0	110.0	70.0	1.40	8.00	TO-220F1 TO-220 TO-262 TO-3P
8N90K*	-	900	±30	8.00	1.30	1.55	3.0	5.0	25.0	20.0	1.40	8.00	TO-220F1 TO-220 TO-262 TO-3P
9N90	-	900	±30	9.00	1.05	1.40	3.0	5.0	120.0	75.0	1.40	9.00	TO-3P TO-247 TO-220F TO-220F1 TO-220F2
9N90K*	-	900	±30	9.00	1.05	1.40	3.0	5.0	30.0	12.0	1.40	9.00	TO-3P TO-247 TO-220F TO-220F1 TO-220F2
9N90-Q	-	900	±30	9.00	1.26	1.40	3.0	5.0	200.0	200.0	1.40	9.00	TO-220
10N90	-	900	±30	10.00	1.05	1.35	3.0	5.0	54.0	47.0	1.40	10.00	TO-220F1 TO-247 TO-3P
10N90K*	-	900	±30	10.00	1.15	1.35	3.0	5.0	25.0	20.0	1.40	10.00	TO-220F1 TO-247 TO-3P
11N90	-	900	±30	11.00	0.87	1.10	3.0	5.0	130.0	85.0	1.40	11.00	TO-220 TO-220F1
12N90	-	900	±30	12.00	0.95	1.10	3.0	5.0	130.0	85.0	1.40	12.00	TO-220 TO-220F1

N-CH	P-CH	Maximum Ratings			R <sub>DS(on)</sub> (Ω)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	V <sub>GS=10V</sub>		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.			TYP.	TYP.	MAX.	Conditions	
9N95	-	950	±30	9.00	1.28	1.40	3.0	5.0	120.0	75.0	1.40	9.00	TO-220 TO-220F1 TO-247

N-CH	P-CH	Maximum Ratings			R <sub>DS(on)</sub> (Ω)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
		V <sub>DSS</sub>	V <sub>GSS</sub>	I <sub>D</sub>	V <sub>GS=10V</sub>		MIN.	MAX.	T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
		(V)	(±V)	(A)	TYP.	MAX.			TYP.	TYP.	MAX.	Conditions	
9N100	-	1000	±30	9.00	1.50	1.70	3.0	5.0	95.0	80.0	1.40	9.00	TO-247



# SUPER JUNCTION MOSFET / IGBT

## SUPER JUNCTION MOSFET

Super Junction	Maximum Ratings			R <sub>DS(ON)</sub> (Ω)		V <sub>GS(th)</sub> (V)		Turn on/off Time		Body Diode		Package
	V <sub>DSS</sub>	V <sub>OSS</sub>	I <sub>D</sub>	V <sub>GS=10V</sub>		V <sub>GS(th)</sub> (V)		T <sub>R</sub> (nS)	T <sub>F</sub> (nS)	V <sub>SD</sub> (V)	I <sub>S</sub> (A)	
	(V)	(±V)	(A)	TYP.	MAX.	MIN.	MAX.	TYP.	TYP.	MAX.	Conditions	
SF11N40	400	±30	11.6	12.10	16.00	3.0	5.0	115.0	140.0	1.40	11.60	TO-220F

## IGBT

N-CH IGBT	Maximum Ratings			V <sub>CE(SAT)</sub> (V)		V <sub>GE(th)</sub> (V)		Turn on/off Time		Resistance		Package
	BV <sub>CER</sub>	BV <sub>GES</sub>	I <sub>C</sub>	V <sub>CE(SAT)</sub> (V)		V <sub>GE(th)</sub> (V)		T <sub>TR</sub> (nS)	T <sub>TL</sub> (nS)	Series Gate	Gate to Emitter	
	(V)	(±V)	(A)	V <sub>GE</sub> (V)	MAX.	MIN.	MAX.	TYP.	TYP.	R1(Ω)	R2(Ω)	
ISL9V3040D3S	510	±12	21.0	4.0	1.6	1.3	2.2	2.1	3.7	70(typ)	10K-26K	TO-220 TO-220F TO-263
UGP7N60	600	±20	34.0	15.0	2.7	4.9	7.2	2.6	2.0	-	-	TO-220
UG1N120	1200	±20	5.30	15.0	2.9	6.0	-	0.47	0.20	-	-	TO-220
UG5N120	1200	±20	21.0	15.0	2.7	6.0	-	0.36	0.12	-	-	TO-220
UG10N120	1200	±20	35.0	15.0	2.7	6.0	-	0.40	0.165	-	-	TO-220
UG25N120	1200	±20	50.0	15.0	2.5	3.5	7.5	0.06	0.10	-	-	TO-220 TO-247

Part No.	Maximum Ratings				Electrical Characteristics									Package
					Off-state			On-state						
	$V_{DRM}$ (V)	$I_{T(RMS)}$ (A)	$I_{GM}$ (A)	$P_{G(AV)}$ (W)	$I_D$ (Leakage) TYP./MAX. (mA)	$V_T$ (V) MAX.	$V_{GT}$ (V) MAX.	$I_{GT}(T_2, G)$ MAX. mA			$I_H$ (mA) MAX.	$T_{GT}$ ( $\mu$ S) TYP.		
				(+, +)	(+, -)	(-, -)	(-, +)							
MAC97A6	400	0.6	1.0	0.1	0.1	1.9	2.0	5.0	5.0	5.0	7.0	10.0	2.0	TO-92 SOT-223
MAC97A8	600													
Z00607	600	0.8	1.0	0.1	0.1	1.5	1.3	5.0	5.0	5.0	7.0	5.0	-	TO-92 SOT-223
SM2LZ47	800	2.0	1.6	0.3	0.02	2.0	1.5	10.0	10.0	10.0	-	10.0	-	TO-220 TO-220F
SM3GZ47*	400	3.0	2.0	0.5	-	1.5	1.5	20.0	20.0	20.0	-	30.0	-	TO-220 TO-220F
SM3JZ47*	600	3.0	2.0	0.5	-	1.5	1.5	20.0	20.0	20.0	-	30.0	-	TO-220 TO-220F
UCR2PM	800	2.0	1.0	0.1	-	2.1	2.0	10.0	10.0	10.0	-	2.98(Typ)	-	TO-220 TO-220F
BTA04-4(T/D/S/A)	400	4.0	4.0	1.0	0.75	1.65	1.5	5.0(T)	5.0(T)	5.0(T)	5.0(T)	15.0(T)	-	TO-220 (Isolated) TO-220F
BTA04-6(T/D/S/A)	600							5.0(D)	5.0(D)	5.0(D)	5.0(D)	15.0(D)		
BTA04-7(T/D/S/A)	700							10.0(S)	10.0(S)	10.0(S)	10.0(S)	25.0(S)		
BTA04-6(CW)	600	4.0	4.0	1.0	0.0	1.7	1.5	5(CW)	5(CW)	5(CW)	-	15.0(CW)	-	TO-220F
BTA06-6(C/B)	600	6.0	4.0	1.0	1.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	-	TO-220 (Isolated) TO-220F
BTA06-8(C/B)	800							50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)		
BTA06-6 (TW/SW/CW/BW)	600	6.0	4.0	1.0	1.0	1.55	1.3	5.0(TW)	5.0(TW)	5.0(TW)	-	10.0(TW)	-	TO-220 (Isolated) TO-220F
BTA06-8 (TW/SW/CW/BW)	800							10.0(SW)	10.0(SW)	10.0(SW)	-	15.0(SW)		
BTA08-6(C/B)	600	8.0	4.0	1.0	1.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	-	TO-220 (Isolated) TO-220F
BTA08-8(C/B)	800							50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)		
BTA08-6 (TW/SW/CW/BW)	600	8.0	4.0	1.0	1.0	1.55	1.3	5.0(TW)	5.0(TW)	5.0(TW)	-	10.0(TW)	-	TO-220 (Isolated) TO-220F
BTA08-8 (TW/SW/CW/BW)	800							10.0(SW)	10.0(SW)	10.0(SW)	-	15.0(SW)		
BTA10-6(C/B)	600	10.0	4.0	1.0	1.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	-	TO-220 (Isolated) TO-220F
BTA10-8(C/B)	800							50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)		
BTA10-6(CW/BW)	600	10.0	4.0	1.0	1.0	1.55	1.3	35.0(CW)	35.0(CW)	35.0(CW)	-	35.0(CW)	-	TO-220 (Isolated) TO-220F
BTA10-8(CW/BW)	800							50.0(BW)	50.0(BW)	50.0(BW)	-	50.0(BW)		
BTA12-6(C/B)	600	12.0	4.0	1.0	1.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	-	TO-220 (Isolated) TO-220F
BTA12-8(C/B)	800							50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)		
BTA12-6 (TW/SW/CW/BW)	600	12.0	4.0	1.0	1.0	1.55	1.3	5.0(TW)	5.0(TW)	5.0(TW)	-	10.0(TW)	-	TO-220 (Isolated) TO-220F
BTA12-8 (TW/SW/CW/BW)	800							10.0(SW)	10.0(SW)	10.0(SW)	-	15.0(SW)		
BTA16-6 (C/B)	600	16.0	4.0	1.0	2.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	-	TO-220 (Isolated) TO-220F
BTA16-8 (C/B)	800							50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)		
BTA16-6 (SW/CW/BW)	600	16.0	4.0	1.0	2.0	1.55	1.3	10.0(SW)	10.0(SW)	10.0(SW)	-	15.0(SW)	-	TO-220 (Isolated) TO-220F
BTA16-8 (SW/CW/BW)	800							35.0(CW)	35.0(CW)	35.0(CW)	-	35.0(CW)		
BTA20-6 (CW/BW)	600	20.0	4.0	1.0	3.0	1.70	1.5	35.0(CW)	35.0(CW)	35.0(CW)	-	50.0(CW)	-	TO-220 (Isolated) TO-220F
BTA20-7 (CW/BW)	700							50.0(BW)	50.0(BW)	50.0(BW)	-	75.0(BW)		
BTA25-6 (B)*	600	25.0	4.0	1.0	3.0	1.55	1.3	50.0	50.0	50.0	100.0	80.0	-	TO-220 (Isolated) TO-3P (Isolated) TO-220F TO-3PML
BTA25-8 (B)*	800													
BTA25-6 (CW/BW)*	600	25.0	4.0	1.0	3.0	1.55	1.3	35.0(CW)	35.0(CW)	35.0(CW)	-	75.0	-	TO-220 (Isolated) TO-3P (Isolated) TO-220F TO-3PML
BTA25-8 (CW/BW)*	800							50.0(BW)	50.0(BW)	50.0(BW)	-	75.0		
BTA41-6*	600	41.0	8.0	1.0	5.0	1.55	1.3	50.0	50.0	50.0	100.0	80.0	-	TO-3P (Isolated) TO-3PML
BTA41-8*	800													
BTB04-4(T/D/S/A)	400	4.0	4.0	1.0	0.75	1.65	1.5	5.0 (T)	5.0 (T)	5.0 (T)	5.0 (T)	15.0(T)	2.0	TO-220 TO-252
BTB04-6(T/D/S/A)	600							5.0(D)	5.0(D)	5.0(D)	5.0(D)	15.0(D)		
BTB04-7(T/D/S/A)	700							10.0(S)	10.0(S)	10.0(S)	10.0(S)	25.0(S)		

Part No.	Maximum Ratings				Electrical Characteristics										Package
					Off-state			On-state							
	$V_{DRM}$ (V)	$I_{T(RMS)}$ (A)	$I_{GM}$ (A)	$P_{G(AV)}$ (W)	$I_D$ (Leakage) TYP./MAX. (mA)	$V_T$ (V) MAX.	$V_{GT}$ (V) MAX.	$I_{GT}(T2,G)$ MAX. mA				$I_H$ (mA) MAX.	$T_{GT}$ ( $\mu$ S) TYP.		
							(+, +)	(+, -)	(-, -)	(-, +)					
BTB06-6(C/B)	600	6.0	4.0	1.0	1.0	1.55	1.3	25.0 (C)	25.0 (C)	25.0 (C)	50.0 (C)	25.0(C)	-	TO-220 TO-252	
BTB06-8(C/B)	800							50.0 (B)	50.0 (B)	50.0 (B)	100.0 (B)	50.0(B)			
BTB06-6 (TW/SW/CW/BW)	600	6.0	4.0	1.0	1.0	1.55	1.3	5.0 (TW)	5.0 (TW)	5.0 (TW)	-	10.0 (TW)	-	TO-220 TO-252	
BTB06-8 (TW/SW/CW/BW)	800							10.0 (SW)	10.0 (SW)	10.0 (SW)		15.0 (SW)			35.0 (CW)
BTB08-6(C/B)	600	8.0	4.0	1.0	1.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	-	TO-220 TO-252	
BTB08-8(C/B)	800							50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)			
BTB08-6 (TW/SW/CW/BW)	600	8.0	4.0	1.0	1.0	1.55	1.3	5.0(TW)	5.0(TW)	5.0(TW)	-	10.0(TW)	-	TO-220 TO-252	
BTB08-8 (TW/SW/CW/BW)	800							10.0(SW)	10.0(SW)	10.0(SW)		15.0(SW)			35.0(CW)
BTB10-6(C/B)	600	10.0	4.0	1.0	1.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	-	TO-220 TO-252	
BTB10-8(C/B)	800							50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)			
BTB10-6(CW/BW)	600	10.0	4.0	1.0	1.0	1.55	1.3	35.0(CW)	35.0(CW)	35.0(CW)	-	35.0(CW)	-	TO-220 TO-252	
BTB10-8(CW/BW)	800							50.0(BW)	50.0(BW)	50.0(BW)		50.0(BW)			50.0(BW)
BTB12-6(C/B)	600	12.0	4.0	1.0	1.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	-	TO-220 TO-252	
BTB12-8(C/B)	800							50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)			
BTB12-6 (TW/SW/CW/BW)	600	12.0	4.0	1.0	1.0	1.55	1.3	5.0(TW)	5.0(TW)	5.0(TW)	-	10.0(TW)	-	TO-220 TO-252	
BTB12-8 (TW/SW/CW/BW)	800							10.0(SW)	10.0(SW)	10.0(SW)		15.0(SW)			35.0(CW)
BTB16-6 (C/B)	600	16.0	4.0	1.0	2.0	1.55	1.3	25.0(C)	25.0(C)	25.0(C)	50.0(C)	25.0(C)	-	TO-220 TO-252	
BTB16-8 (C/B)	800							50.0(B)	50.0(B)	50.0(B)	100.0(B)	50.0(B)			
BTB16-6 (SW/CW/BW)	600	16.0	4.0	1.0	2.0	1.55	1.3	10.0(SW)	10.0(SW)	10.0(SW)	-	15.0(SW)	-	TO-220 TO-252	
BTB16-8 (SW/CW/BW)	800							35.0(CW)	35.0(CW)	35.0(CW)		50.0(BW)			50.0(BW)
BTB20-6 (CW/BW)	600	20.0	4.0	1.0	3.0	1.70	1.5	35.0(CW)	35.0(CW)	35.0(CW)	-	50.0(CW)	-	TO-220 TO-252	
BTB20-7 (CW/BW)	700							50.0(BW)	50.0(BW)	50.0(BW)		75.0(BW)			75.0(BW)
BTB25-6 (B)*	600	25.0	4.0	1.0	3.0	1.55	1.3	50.0	50.0	50.0	100.0	80.0	-	TO-220 TO-252 TO-3P	
BTB25-8 (B)*	800														
BTB25-6 (CW/BW)*	600	25.0	4.0	1.0	3.0	1.55	1.3	35.0(CW)	35.0(CW)	35.0(CW)	-	75.0	-	TO-220 TO-252 TO-3P	
BTBA25-8 (CW/BW)*	800							50.0(BW)	50.0(BW)	50.0(BW)		50.0(BW)			50.0(BW)
BTB41-6*	600	41.0	8.0	1.0	5.0	1.55	1.3	50.0	50.0	50.0	100.0	80.0	-	TO-3P	
BTB41-8*	800														
U12JZ47-4	400	12.0	2.0	0.5	0.02	1.5	1.5	30.0	30.0	30.0	-	50.0	-	TO-220 (Isolated) TO-220F	
U12JZ47A-4								20.0	20.0	20.0	-				
U12JZ47-6	600	12.0	2.0	0.5	0.02	1.5	1.5	30.0	30.0	30.0	-	50.0	-	TO-220 (Isolated) TO-220F	
U12JZ47A-6								20.0	20.0	20.0	-				
UCR16CM-4	400	16.0	2.0	0.5	2.0	1.5	1.5	30.0	30.0	30.0	-	50.0	-	TO-220 (Isolated) TO-220F	
UCR16CMA-4								20.0	20.0	20.0	-				
UCR16CM-6	600	16.0	2.0	0.5	2.0	1.5	1.5	30.0	30.0	30.0	-	50.0	-	TO-220 (Isolated) TO-220F	
UCR16CMA-6								20.0	20.0	20.0	-				
UCR08AL-7*	700	0.8	0.5	0.1	-	2.0	2.0	5.0	5.0	5.0	-	-	-	TO-92 SOT-89	

Part No.	Maximum Ratings				Electrical Characteristics									Package					
					Off-state			On-state											
	$V_{DRM}$ (V)	$I_{T(RMS)}$ (A)	$I_{GM}$ (A)	$P_{G(AV)}$ (W)	$I_D$ (Leakage) TYP./MAX. (mA)	$V_T$ (V) MAX.	$V_{GT}$ (V) MAX.	$I_{GT}(T2,G)$ MAX. mA				$I_H$ (mA) MAX.	$T_{GT}$ ( $\mu$ S) TYP.						
								(+, +)	(+, -)	(-, -)	(-, +)								
UT131-5	500	1.0	2.0	0.5	0.5	1.5	1.5	3.0	3.0	5.0	7.0	5.0	2.0	TO-92 SOT-223					
UT131-6	600																		
UT131-8	800																		
UT132-5*	500	1.0	2.0	0.5	0.5	1.7	1.5	5.0	5.0	5.0	10.0	10.0	2.0	TO-92					
UT132-6*	600																		
UT134E-5	500	4.0	2.0	0.5	0.5	1.7	1.5	10.0	10.0	10.0	25.0	15.0	2.0	TO-126					
UT134F-5								25.0	25.0	25.0	70.0	15.0							
UT134G-5								50.0	50.0	50.0	100.0	30.0							
UT134E-6	600	4.0	2.0	0.5	0.5	1.7	1.5	10.0	10.0	10.0	25.0	15.0	2.0	TO-126					
UT134F-6								25.0	25.0	25.0	70.0	15.0							
UT134G-6								50.0	50.0	50.0	100.0	30.0							
UT134E-8	800	4.0	2.0	0.5	0.5	1.7	1.5	10.0	10.0	10.0	25.0	15.0	2.0	TO-126					
UT134F-8								25.0	25.0	25.0	70.0	15.0							
UT134G-8								50.0	50.0	50.0	100.0	30.0							
UT234D-6*	600	4.0	2.0	0.5	0.5	1.5	1.5	5.0	5.0	5.0	10.0	6.0	2.0	TO-220 TO-252					
UT234D-8*	800																		
UT234E-6*	600																		
UT234E-8*	800																		
UT234FD-6*	600	4.0	2.0	0.5	0.5	1.5	1.5	5.0	5.0	5.0	10.0	6.0	2.0	TO-220F					
UT234FD-8*	800																		
UT234FE-6*	600																		
UT234FE-8*	800																		
UT136E-5	500	6.0	2.0	0.5	0.5	1.7	1.5	10.0	10.0	10.0	25.0	15.0	2.0	TO-220 TO-252					
UT136F-5								25.0	25.0	25.0	70.0	15.0							
UT136G-5								50.0	50.0	50.0	100.0	30.0							
UT136FE-5	500	6.0	2.0	0.5	0.5	1.7	1.5	10.0	10.0	10.0	25.0	15.0	2.0	TO-220F					
UT136FF-5								25.0	25.0	25.0	70.0	15.0							
UT136FG-5								50.0	50.0	50.0	100.0	30.0							
UT136E-6	600	6.0	2.0	0.5	0.5	1.7	1.5	10.0	10.0	10.0	25.0	15.0	2.0	TO-220 TO-252					
UT136F-6								25.0	25.0	25.0	70.0	15.0							
UT136G-6								50.0	50.0	50.0	100.0	30.0							
UT136FE-6	600	6.0	2.0	0.5	0.5	1.7	1.5	10.0	10.0	10.0	25.0	15.0	2.0	TO-220F					
UT136FF-6								25.0	25.0	25.0	70.0	15.0							
UT136FG-6								50.0	50.0	50.0	100.0	30.0							
UT136E-8	800	6.0	2.0	0.5	0.5	1.7	1.5	10.0	10.0	10.0	25.0	15.0	2.0	TO-220 TO-252					
UT136F-8								25.0	25.0	25.0	70.0	15.0							
UT136G-8								50.0	50.0	50.0	100.0	30.0							
UT136FE-8	800	6.0	2.0	0.5	0.5	1.7	1.5	10.0	10.0	10.0	25.0	15.0	2.0	TO-220F					
UT136FF-8								25.0	25.0	25.0	70.0	15.0							
UT136FG-8								50.0	50.0	50.0	100.0	30.0							
UT137E-5	500	8.0	2.0	0.5	0.5	1.65	1.5	10.0	10.0	10.0	25.0	20.0	2.0	TO-220 TO-252					
UT137F-5								25.0	25.0	25.0	70.0	20.0							
UT137G-5								50.0	50.0	50.0	100.0	40.0							
UT137FE-5	500	8.0	2.0	0.5	0.5	1.65	1.5	10.0	10.0	10.0	25.0	20.0	2.0	TO-220F					
UT137FF-5								25.0	25.0	25.0	70.0	20.0							
UT137FG-5								50.0	50.0	50.0	100.0	40.0							
UT137E-6	600	8.0	2.0	0.5	0.5	1.65	1.5	10.0	10.0	10.0	25.0	20.0	2.0	TO-220 TO-252					
UT137F-6								25.0	25.0	25.0	70.0	20.0							
UT137G-6								50.0	50.0	50.0	100.0	40.0							

Part No.	Maximum Ratings				Electrical Characteristics									Package
					Off-state			On-state						
	$V_{DRM}$	$I_{T(RMS)}$	$I_{GM}$	$P_{G(AV)}$	$I_D$ (Leakage)	$V_T$ (V)	$V_{GT}$ (V)	$I_{GT}(T2,G)$ MAX. mA				$I_H$ (mA)	$T_{GT}$ ( $\mu$ S)	
	(V)	(A)	(A)	(W)	TYP./MAX. (mA)	MAX.	MAX.	(+, +)	(+, -)	(-, -)	(-, +)	MAX.	TYP.	
UT137FE-6	600	8.0	2.0	0.5	0.5	1.65	1.5	10.0	10.0	10.0	25.0	20.0	2.0	TO-220F
25.0								25.0	25.0	70.0	20.0			
50.0								50.0	50.0	100.0	40.0			
UT137E-8	800	8.0	2.0	0.5	0.5	1.65	1.5	10.0	10.0	10.0	25.0	20.0	2.0	TO-220 TO-252
25.0								25.0	25.0	70.0	20.0			
50.0								50.0	50.0	100.0	40.0			
UT137FE-8	800	8.0	2.0	0.5	0.5	1.65	1.5	10.0	10.0	10.0	25.0	20.0	2.0	TO-220F
25.0								25.0	25.0	70.0	20.0			
50.0								50.0	50.0	100.0	40.0			
UT138E-5	500	12.0	2.0	0.5	0.5	1.65	1.5	10.0	10.0	10.0	25.0	30.0	2.0	TO-220 TO-252
25.0								25.0	25.0	70.0	30.0			
50.0								50.0	50.0	100.0	60.0			
UT138FE-5	500	12.0	2.0	0.5	0.5	1.65	1.5	10.0	10.0	10.0	25.0	30.0	2.0	TO-220F
25.0								25.0	25.0	70.0	30.0			
50.0								50.0	50.0	100.0	60.0			
UT138E-6	600	12.0	2.0	0.5	0.5	1.65	1.5	10.0	10.0	10.0	25.0	30.0	2.0	TO-220 TO-252
25.0								25.0	25.0	70.0	30.0			
50.0								50.0	50.0	100.0	60.0			
UT138FE-6	600	12.0	2.0	0.5	0.5	1.65	1.5	10.0	10.0	10.0	25.0	30.0	2.0	TO-220F
25.0								25.0	25.0	70.0	30.0			
50.0								50.0	50.0	100.0	60.0			
UT138E-8	800	12.0	2.0	0.5	0.5	1.65	1.5	10.0	10.0	10.0	25.0	30.0	2.0	TO-220 TO-252
25.0								25.0	25.0	70.0	30.0			
50.0								50.0	50.0	100.0	60.0			
UT138FE-8	800	12.0	2.0	0.5	0.5	1.65	1.5	10.0	10.0	10.0	25.0	30.0	2.0	TO-220F
25.0								25.0	25.0	70.0	30.0			
50.0								50.0	50.0	100.0	60.0			
UT139-6*	600	16.0	2.0	0.5	0.5	1.6	1.5	35.0	35.0	35.0	70.0	45.0	2.0	TO-220 TO-252
UT139-8*	800							10.0	10.0	10.0	25.0	45.0		
UT139E-6*	600							25.0	25.0	25.0	70.0	45.0		
UT139E-8*	800							50.0	50.0	50.0	100.0	60.0		
UT139F-6*	600							10.0	10.0	10.0	25.0	45.0		
UT139F-8*	800							25.0	25.0	25.0	70.0	45.0		
UT139G-6*	600							50.0	50.0	50.0	100.0	60.0		
UT139G-8*	800							10.0	10.0	10.0	25.0	45.0		
UT139FE-6*	600	16.0	2.0	0.5	0.5	1.6	1.5	10.0	10.0	10.0	25.0	45.0	2.0	TO-220F
UT139FE-8*	800							25.0	25.0	25.0	70.0	45.0		
UT139FF-6*	600							50.0	50.0	50.0	100.0	60.0		
UT139FF-8*	800							10.0	10.0	10.0	25.0	45.0		
UT139FG-6*	600							25.0	25.0	25.0	70.0	45.0		
UT139FG-8*	800							50.0	50.0	50.0	100.0	60.0		

Part No.	Maximum Ratings				Electrical Characteristics (TA=25°C)								Package
	VDRM	IT(RMS)	IGM	PG(AV)	IDRM (uA)	VTM (V)	VGT (V)	IGT (mA)		IH (mA)	IL (mA)	TGD (TGT) (us)	
	(V)	(A)	(A)	(W)	MAX.	MAX.	MAX.	TYP.	MAX.	MAX.	MAX.	MAX. (*TYP.)	
MCR100-4	200	0.80	1.00	0.10	10.00	1.70	0.80	0.04	0.20	5.00	10.00	-	SOT-89 SOT-23 TO-92
MCR100-6	400												
MCR100-8	600												
MCR101-4	200	0.80	1.00	0.10	10.00	1.70	0.80	0.04	0.20	5.00	10.00	-	TO-92
MCR101-6	400												
MCR101-8	600												
MCR106-6	400	4.00	0.20	0.10	10.00	2.00	1.00	-	0.20	5.00	-	-	TO-126
MCR106-8	600												
ML1225	300	0.80	0.10	0.15	1.00	1.40	0.80	-	0.20	5.00	6.00	2.20	SOT-23 TO-92
XL1225	400												
PCR406-5	300	0.80	0.10	0.15	1.00	1.40	0.80	-	0.20	5.00	6.00	2.20	TO-92
PCR406-6	400												
US104S-4	400	4.00	1.20	0.20	5.00	1.60	0.80	-	0.20	5.00	6.00	-	TO-220 TO-251 TO-252
US104S-6	600												
US104S-8	800												
US104N-4	400	4.00	1.20	0.20	5.00	1.60	1.30	2.00	15.00	30.00	60.00	-	TO-220 TO-251 TO-252
US104N-6	600												
US104N-8	800												
US108S-4	400	8.00	4.00	1.00	5.00	1.60	0.80	-	0.20	5.00	6.00	-	TO-220 TO-251 TO-252
US108S-6	600												
US108S-8	800												
US108N-4	400	8.00	4.00	1.00	5.00	1.60	1.30	2.00	15.00	30.00	70.00	-	TO-220 TO-251 TO-252
US108N-6	600												
US108N-8	800												
US112S-4	400	12.00	4.00	1.00	5.00	1.60	0.80	-	0.20	5.00	6.00	-	TO-220 TO-251 TO-252
US112S-6	600												
US112S-8	800												
US112N-4	400	12.00	4.00	1.00	5.00	1.60	1.30	2.00	15.00	30.00	60.00	-	TO-220 TO-251 TO-252
US112N-6	600												
US112N-8	800												
CR03AM-12	600	0.47	0.30	0.10	100.00	1.80	0.80	-	0.10	3.00	-	-	SOT-89 SOT-23 TO-92
X0202	600	1.25	1.2	0.2	5	1.45	0.8	-	0.2	5	6	-	SOT-223 TO-92
X0202A	800												
BT148-400*	400	4	2	0.5	500	1.8	1.5	0.015	0.2	6	10	2	TO-220 TO-251 TO-252
BT148-500*	500												
BT148-600*	600												
BT149-200*	200	0.8	1	0.1	100	1.7	0.8	0.05	0.2	5	6	2	TO-92
BT149-400*	400												
BT149-600*	600												
BT150-500	500	4.00	2.00	0.50	500.00	1.80	1.50	0.015	0.20	6.00	10.00	2.00	TO-220 TO-251 TO-252
BT150-650	650												
BT150-800	800												
BT151-500	500	12.00	2.00	0.50	500.00	1.75	1.50	2.00	15.00	20.00	40.00	2.00	TO-220 TO-251 TO-252
BT151-650	650												
BT151-800	800												
BT152-400	400	20.00	5.00	0.50	1000.00	1.75	1.50	3.00	32.00	60.00	80.00	*2.00	TO-220 TO-220F
BT152-600	600												
BT152-800	800												
BT168-500*	500	0.8	1	0.1	100	1.7	0.8	0.05	0.2	5	6	*2.00	TO-92 SOT-223
BT168-600*	600												
BT169B*	200	0.80	1.00	0.10	100.00	1.70	0.80	0.05	0.20	5.00	6.00	*2.00	TO-92 SOT-223
BT169D*	400												
BT169E*	500												
BT169G*	600												
BT169H*	800												
BT258-500*	500	8.00	2.00	0.50	500.00	1.60	1.50	0.05	0.20	6.00	10.00	*2.00	TO-220 TO-220F TO-251 TO-252
BT258-600*	600												
BT258-800*	800												

## CRD(Current Regulator Diode)\*

Part Number		Peak Operating Voltage	Regulator Current				Limiting Current		Package
V+	Test Voltage		IH (mA)			Vk	@Ik		
			(V)	Min	Nom	Max	(V)		
UCR024-30		30.0	10.0	0.192	0.24	0.288	≅ 1.5	0.8 IH	SOT-89 TO-251 TO-252
UCR033-30		30.0	10.0	0.264	0.33	0.396	≅ 1.5	0.8 IH	SOT-89 TO-251 TO-252
UCR043-30		30.0	10.0	0.344	0.43	0.516	≅ 1.5	0.8 IH	SOT-89 TO-251 TO-252
UCR056-30		30.0	10.0	0.448	0.56	0.672	≅ 2	0.8 IH	SOT-89 TO-251 TO-252
UCR075-30		30.0	10.0	0.600	0.75	0.900	≅ 2	0.8 IH	SOT-89 TO-251 TO-252
UCR100-30		30.0	10.0	0.800	1.00	1.200	≅ 2.5	0.8 IH	SOT-89 TO-251 TO-252
UCR115-30		30.0	10.0	0.800	1.15	1.500	≅ 2.5	0.8 IH	SOT-89 TO-251 TO-252
UCR140-30		30.0	10.0	1.120	1.40	1.680	≅ 2.5	0.8 IH	SOT-89 TO-251 TO-252
UCR160-30		30.0	10.0	1.440	1.60	1.760	≅ 2.5	0.8 IH	SOT-89 TO-251 TO-252
UCR180-30		30.0	10.0	1.620	1.80	1.980	≅ 2.5	0.8 IH	SOT-89 TO-251 TO-252
UCR200-30		30.0	10.0	1.800	2.00	2.200	≅ 2.5	0.8 IH	SOT-89 TO-251 TO-252
UCR220-30		30.0	10.0	1.980	2.20	2.420	≅ 2.5	0.8 IH	SOT-89 TO-251 TO-252
UCR225-30		30.0	10.0	1.500	2.25	3.000	≅ 2.5	0.8 IH	SOT-89 TO-251 TO-252
UCR240-30		30.0	10.0	2.160	2.40	2.640	≅ 2.5	0.8 IH	SOT-89 TO-251 TO-252
UCR270-30		30.0	10.0	2.430	2.70	2.970	≅ 2.5	0.8 IH	SOT-89 TO-251 TO-252
UCR300-30		30.0	10.0	2.700	3.00	3.300	≅ 2.5	0.8 IH	SOT-89 TO-251 TO-252
UCR330-30		30.0	10.0	2.970	3.30	3.630	≅ 2.5	0.8 IH	SOT-89 TO-251 TO-252
UCR360-30		30.0	10.0	3.240	3.60	3.960	≅ 2.5	0.8 IH	SOT-89 TO-251 TO-252
UCR390-30		30.0	10.0	3.510	3.90	4.290	≅ 3	0.8 IH	SOT-89 TO-251 TO-252
UCR400-30		30.0	10.0	3.000	4.00	5.00	≅ 3	0.8 IH	SOT-89 TO-251 TO-252
UCR430-30		30.0	10.0	3.870	4.30	4.730	≅ 3	0.8 IH	SOT-89 TO-251 TO-252
UCR470-30		30.0	10.0	4.230	4.70	5.170	≅ 3	0.8 IH	SOT-89 TO-251 TO-252
UCR650-30		30.0	10.0	5.000	6.50	8.000	≅ 3.5	0.8 IH	SOT-89 TO-251 TO-252
UCR1050-30		30.0	10.0	8.000	10.50	13.000	≅ 3.5	0.8 IH	SOT-89 TO-251 TO-252
UCR1550-30		30.0	10.0	13.000	15.50	18.000	≅ 4	0.8 IH	SOT-89 TO-251 TO-252
UCR2050-30		30.0	10.0	18.000	20.50	23.000	≅ 4	0.8 IH	SOT-89 TO-251 TO-252
UCR2550-30		30.0	10.0	23.000	25.50	28.000	≅ 4	0.8 IH	SOT-89 TO-251 TO-252
UCR3150-30		30.0	10.0	28.000	31.50	35.000	≅ 4.5	0.8 IH	SOT-89 TO-251 TO-252
UCR4000-30		30.0	10.0	35.000	40.00	45.000	≅ 4.5	0.8 IH	SOT-89 TO-251 TO-252

# DIODE

Part Number		Peak Operating Voltage	Regulator Current				Limiting Current		Package
V+	Test Voltage		IH (mA)			VK	@IK		
			(V)	Min	Nom			Max	
UCR024-40		40.0	10.0	0.192	0.24	0.288	≅ 1.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR033-40		40.0	10.0	0.264	0.33	0.396	≅ 1.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR043-40		40.0	10.0	0.344	0.43	0.516	≅ 1.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR056-40		40.0	10.0	0.448	0.56	0.672	≅ 2	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR075-40		40.0	10.0	0.600	0.75	0.900	≅ 2	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR100-40		40.0	10.0	0.800	1.00	1.200	≅ 2.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR115-40		40.0	10.0	0.800	1.15	1.500	≅ 2.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR140-40		40.0	10.0	1.120	1.40	1.680	≅ 2.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR160-40		40.0	10.0	1.440	1.60	1.760	≅ 2.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR180-40		40.0	10.0	1.620	1.80	1.980	≅ 2.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR200-40		40.0	10.0	1.800	2.00	2.200	≅ 2.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR220-40		40.0	10.0	1.980	2.20	2.420	≅ 2.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR225-40		40.0	10.0	1.500	2.25	3.000	≅ 2.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR240-40		40.0	10.0	2.160	2.40	2.640	≅ 2.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR270-40		40.0	10.0	2.430	2.70	2.970	≅ 2.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR300-40		40.0	10.0	2.700	3.00	3.300	≅ 2.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR330-40		40.0	10.0	2.970	3.30	3.630	≅ 2.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR360-40		40.0	10.0	3.240	3.60	3.960	≅ 2.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR390-40		40.0	10.0	3.510	3.90	4.290	≅ 3	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR400-40		40.0	10.0	3.000	4.00	5.00	≅ 3	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR430-40		40.0	10.0	3.870	4.30	4.730	≅ 3	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR470-40		40.0	10.0	4.230	4.70	5.170	≅ 3	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR650-40		40.0	10.0	5.000	6.50	8.000	≅ 3.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR1050-40		40.0	10.0	8.000	10.50	13.000	≅ 3.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR1550-40		40.0	10.0	13.000	15.50	18.000	≅ 4	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR2050-40		40.0	10.0	18.000	20.50	23.000	≅ 4	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR2550-40		40.0	10.0	23.000	25.50	28.000	≅ 4	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR3150-40		40.0	10.0	28.000	31.50	35.000	≅ 4.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15
UCR4000-40		40.0	10.0	35.000	40.00	45.000	≅ 4.5	0.8 IH	TO-92-2 SOD-123 SOT-89 TO-220 TO-251 TO-252 DO-41 DO-15



# DIODE

Part Number		Peak Operating Voltage	Regulator Current				Limiting Current		Package
V+	Test Voltage		IH (mA)			Vk	@IK		
			(V)	Min	Nom	Max	(V)		
UCR024-45		45.0	10.0	0.192	0.24	0.288	≅ 1.5	0.8 IH	TO-92-2 SOD-123
UCR033-45		45.0	10.0	0.264	0.33	0.396	≅ 1.5	0.8 IH	TO-92-2 SOD-123
UCR043-45		45.0	10.0	0.344	0.43	0.516	≅ 1.5	0.8 IH	TO-92-2 SOD-123
UCR056-45		45.0	10.0	0.448	0.56	0.672	≅ 2	0.8 IH	TO-92-2 SOD-123
UCR075-45		45.0	10.0	0.600	0.75	0.900	≅ 2	0.8 IH	TO-92-2 SOD-123
UCR100-45		45.0	10.0	0.800	1.00	1.200	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR115-45		45.0	10.0	0.800	1.15	1.500	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR140-45		45.0	10.0	1.120	1.40	1.680	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR160-45		45.0	10.0	1.440	1.60	1.760	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR180-45		45.0	10.0	1.620	1.80	1.980	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR200-45		45.0	10.0	1.800	2.00	2.200	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR220-45		45.0	10.0	1.980	2.20	2.420	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR225-45		45.0	10.0	1.500	2.25	3.000	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR240-45		45.0	10.0	2.160	2.40	2.640	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR270-45		45.0	10.0	2.430	2.70	2.970	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR300-45		45.0	10.0	2.700	3.00	3.300	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR330-45		45.0	10.0	2.970	3.30	3.630	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR360-45		45.0	10.0	3.240	3.60	3.960	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR390-45		45.0	10.0	3.510	3.90	4.290	≅ 3	0.8 IH	TO-92-2 SOD-123
UCR400-45		45.0	10.0	3.000	4.00	5.00	≅ 3	0.8 IH	TO-92-2 SOD-123
UCR430-45		45.0	10.0	3.870	4.30	4.730	≅ 3	0.8 IH	TO-92-2 SOD-123
UCR470-45		45.0	10.0	4.230	4.70	5.170	≅ 3	0.8 IH	TO-92-2 SOD-123
UCR650-45		45.0	10.0	5.000	6.50	8.000	≅ 3.5	0.8 IH	TO-92-2 SOD-123
UCR1050-45		45.0	10.0	8.000	10.50	13.000	≅ 3.5	0.8 IH	TO-92-2 SOD-123
UCR1550-45		45.0	10.0	13.000	15.50	18.000	≅ 4	0.8 IH	TO-92-2 SOD-123
UCR2050-45		45.0	10.0	18.000	20.50	23.000	≅ 4	0.8 IH	TO-92-2 SOD-123
UCR2550-45		45.0	10.0	23.000	25.50	28.000	≅ 4	0.8 IH	TO-92-2 SOD-123
UCR3150-45		45.0	10.0	28.000	31.50	35.000	≅ 4.5	0.8 IH	TO-92-2 SOD-123
UCR4000-45		45.0	10.0	35.000	40.00	45.000	≅ 4.5	0.8 IH	TO-92-2 SOD-123

# DIODE

Part Number		Peak Operating Voltage	Regulator Current				Limiting Current		Package
V+	Test Voltage		IH (mA)			Vk	@IK		
			(V)	Min	Nom	Max	(V)		
UCR024-50		50.0	10.0	0.192	0.24	0.288	≅ 1.5	0.8 IH	TO-92-2 SOD-123
UCR033-50		50.0	10.0	0.264	0.33	0.396	≅ 1.5	0.8 IH	TO-92-2 SOD-123
UCR043-50		50.0	10.0	0.344	0.43	0.516	≅ 1.5	0.8 IH	TO-92-2 SOD-123
UCR056-50		50.0	10.0	0.448	0.56	0.672	≅ 2	0.8 IH	TO-92-2 SOD-123
UCR075-50		50.0	10.0	0.600	0.75	0.900	≅ 2	0.8 IH	TO-92-2 SOD-123
UCR100-50		50.0	10.0	0.800	1.00	1.200	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR115-50		50.0	10.0	0.800	1.15	1.500	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR140-50		50.0	10.0	1.120	1.40	1.680	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR160-50		50.0	10.0	1.440	1.60	1.760	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR180-50		50.0	10.0	1.620	1.80	1.980	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR200-50		50.0	10.0	1.800	2.00	2.200	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR220-50		50.0	10.0	1.980	2.20	2.420	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR225-50		50.0	10.0	1.500	2.25	3.000	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR240-50		50.0	10.0	2.160	2.40	2.640	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR270-50		50.0	10.0	2.430	2.70	2.970	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR300-50		50.0	10.0	2.700	3.00	3.300	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR330-50		50.0	10.0	2.970	3.30	3.630	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR360-50		50.0	10.0	3.240	3.60	3.960	≅ 2.5	0.8 IH	TO-92-2 SOD-123
UCR390-50		50.0	10.0	3.510	3.90	4.290	≅ 3	0.8 IH	TO-92-2 SOD-123
UCR400-50		50.0	10.0	3.000	4.00	5.00	≅ 3	0.8 IH	TO-92-2 SOD-123
UCR430-50		50.0	10.0	3.870	4.30	4.730	≅ 3	0.8 IH	TO-92-2 SOD-123
UCR470-50		50.0	10.0	4.230	4.70	5.170	≅ 3	0.8 IH	TO-92-2 SOD-123
UCR650-50		50.0	10.0	5.000	6.50	8.000	≅ 3.5	0.8 IH	TO-92-2 SOD-123
UCR1050-50		50.0	10.0	8.000	10.50	13.000	≅ 3.5	0.8 IH	TO-92-2 SOD-123
UCR1550-50		50.0	10.0	13.000	15.50	18.000	≅ 4	0.8 IH	TO-92-2 SOD-123
UCR2050-50		50.0	10.0	18.000	20.50	23.000	≅ 4	0.8 IH	TO-92-2 SOD-123
UCR2550-50		50.0	10.0	23.000	25.50	28.000	≅ 4	0.8 IH	TO-92-2 SOD-123
UCR3150-50		50.0	10.0	28.000	31.50	35.000	≅ 4.5	0.8 IH	TO-92-2 SOD-123
UCR4000-50		50.0	10.0	35.000	40.00	45.000	≅ 4.5	0.8 IH	TO-92-2 SOD-123


# DIODE

V+	Part Number	Peak Operating Voltage	Regulator Current			Limiting Current		Package	
			Test Voltage	IH (mA)		VK	@IK		
				(V)	Min				Nom
	UCR024-70	70.0	10.0	0.192	0.24	0.288	≅ 1.5	0.8 IH	TO-92-2 SOD-123
	UCR033-70	70.0	10.0	0.264	0.33	0.396	≅ 1.5	0.8 IH	TO-92-2 SOD-123
	UCR043-70	70.0	10.0	0.344	0.43	0.516	≅ 1.5	0.8 IH	TO-92-2 SOD-123
	UCR056-70	70.0	10.0	0.448	0.56	0.672	≅ 2	0.8 IH	TO-92-2 SOD-123
	UCR075-70	70.0	10.0	0.600	0.75	0.900	≅ 2	0.8 IH	TO-92-2 SOD-123
	UCR100-70	70.0	10.0	0.800	1.00	1.200	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR115-70	70.0	10.0	0.800	1.15	1.500	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR140-70	70.0	10.0	1.120	1.40	1.680	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR160-70	70.0	10.0	1.440	1.60	1.760	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR180-70	70.0	10.0	1.620	1.80	1.980	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR200-70	70.0	10.0	1.800	2.00	2.200	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR220-70	70.0	10.0	1.980	2.20	2.420	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR225-70	70.0	10.0	1.500	2.25	3.000	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR240-70	70.0	10.0	2.160	2.40	2.640	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR270-70	70.0	10.0	2.430	2.70	2.970	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR300-70	70.0	10.0	2.700	3.00	3.300	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR330-70	70.0	10.0	2.970	3.30	3.630	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR360-70	70.0	10.0	3.240	3.60	3.960	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR390-70	70.0	10.0	3.510	3.90	4.290	≅ 3	0.8 IH	TO-92-2 SOD-123
	UCR400-70	70.0	10.0	3.000	4.00	5.00	≅ 3	0.8 IH	TO-92-2 SOD-123
	UCR430-70	70.0	10.0	3.870	4.30	4.730	≅ 3	0.8 IH	TO-92-2 SOD-123
	UCR470-70	70.0	10.0	4.230	4.70	5.170	≅ 3	0.8 IH	TO-92-2 SOD-123
	UCR650-70	70.0	10.0	5.000	6.50	8.000	≅ 3.5	0.8 IH	TO-92-2 SOD-123
	UCR1050-70	70.0	10.0	8.000	10.50	13.000	≅ 3.5	0.8 IH	TO-92-2 SOD-123
	UCR1550-70	70.0	10.0	13.000	15.50	18.000	≅ 4	0.8 IH	TO-92-2 SOD-123
	UCR2050-70	70.0	10.0	18.000	20.50	23.000	≅ 4	0.8 IH	TO-92-2 SOD-123
	UCR2550-70	70.0	10.0	23.000	25.50	28.000	≅ 4	0.8 IH	TO-92-2 SOD-123
	UCR3150-70	70.0	10.0	28.000	31.50	35.000	≅ 4.5	0.8 IH	TO-92-2 SOD-123
	UCR4000-70	70.0	10.0	35.000	40.00	45.000	≅ 4.5	0.8 IH	TO-92-2 SOD-123


# DIODE


V+	Part Number	Peak Operating Voltage	Regulator Current			Limiting Current		Package	
			Test Voltage	IH (mA)		VK	@IK		
				(V)	Min				Nom
	UCR024-100	100.0	10.0	0.192	0.24	0.288	≅ 1.5	0.8 IH	TO-92-2 SOD-123
	UCR033-100	100.0	10.0	0.264	0.33	0.396	≅ 1.5	0.8 IH	TO-92-2 SOD-123
	UCR043-100	100.0	10.0	0.344	0.43	0.516	≅ 1.5	0.8 IH	TO-92-2 SOD-123
	UCR056-100	100.0	10.0	0.448	0.56	0.672	≅ 2	0.8 IH	TO-92-2 SOD-123
	UCR075-100	100.0	10.0	0.600	0.75	0.900	≅ 2	0.8 IH	TO-92-2 SOD-123
	UCR100-100	100.0	10.0	0.800	1.00	1.200	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR115-100	100.0	10.0	0.800	1.15	1.500	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR140-100	100.0	10.0	1.120	1.40	1.680	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR160-100	100.0	10.0	1.440	1.60	1.760	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR180-100	100.0	10.0	1.620	1.80	1.980	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR200-100	100.0	10.0	1.800	2.00	2.200	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR220-100	100.0	10.0	1.980	2.20	2.420	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR225-100	100.0	10.0	1.500	2.25	3.000	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR240-100	100.0	10.0	2.160	2.40	2.640	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR270-100	100.0	10.0	2.430	2.70	2.970	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR300-100	100.0	10.0	2.700	3.00	3.300	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR330-100	100.0	10.0	2.970	3.30	3.630	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR360-100	100.0	10.0	3.240	3.60	3.960	≅ 2.5	0.8 IH	TO-92-2 SOD-123
	UCR390-100	100.0	10.0	3.510	3.90	4.290	≅ 3	0.8 IH	TO-92-2 SOD-123
	UCR400-100	100.0	10.0	3.000	4.00	5.00	≅ 3	0.8 IH	TO-92-2 SOD-123
	UCR430-100	100.0	10.0	3.870	4.30	4.730	≅ 3	0.8 IH	TO-92-2 SOD-123
	UCR470-100	100.0	10.0	4.230	4.70	5.170	≅ 3	0.8 IH	TO-92-2 SOD-123
	UCR650-100	100.0	10.0	5.000	6.50	8.000	≅ 3.5	0.8 IH	TO-92-2 SOD-123
	UCR1050-100	100.0	10.0	8.000	10.50	13.000	≅ 3.5	0.8 IH	TO-92-2 SOD-123
	UCR1550-100	100.0	10.0	13.000	15.50	18.000	≅ 4	0.8 IH	TO-92-2 SOD-123
	UCR2050-100	100.0	10.0	18.000	20.50	23.000	≅ 4	0.8 IH	TO-92-2 SOD-123
	UCR2550-100	100.0	10.0	23.000	25.50	28.000	≅ 4	0.8 IH	TO-92-2 SOD-123
	UCR3150-100	100.0	10.0	28.000	31.50	35.000	≅ 4.5	0.8 IH	TO-92-2 SOD-123
	UCR4000-100	100.0	10.0	35.000	40.00	45.000	≅ 4.5	0.8 IH	TO-92-2 SOD-123

## Zener Diode


 Part Number	Power Dissipation	Zener Voltage Range			Zener Impedance		Reverse Leakage Current		Package	
		Pd	V <sub>Z</sub> @I <sub>ZT</sub>			MAX Z <sub>ZT</sub> @I <sub>ZT</sub>		MAX I <sub>R</sub> @V <sub>R</sub>		
			mW	Nom. V	Min. V	Max. V	Ω	mA		μA
BZT52C1V8S	200	1.80	1.71	1.89	90.0	5.0	150.0	1.0	SOD-323	
BZT52C2V0S	200	2.00	1.90	2.10	90.0	5.0	150.0	1.0	SOD-323	
BZT52C2V4S	200	2.40	2.28	2.52	85.0	5.0	100.0	1.0	SOD-323	
BZT52C2V7S	200	2.70	2.57	2.84	83.0	5.0	75.0	1.0	SOD-323	
BZT52C3S	200	3.00	2.85	3.15	95.0	5.0	50.0	1.0	SOD-323	
BZT52C3V3S	200	3.30	3.14	3.47	95.0	5.0	25.0	1.0	SOD-323	
BZT52C3V6S	200	3.60	3.42	3.78	95.0	5.0	15.0	1.0	SOD-323	
BZT52C3V9S	200	3.90	3.71	4.10	95.0	5.0	10.0	1.0	SOD-323	
BZT52C4V3S	200	4.30	4.09	4.52	95.0	5.0	5.0	1.0	SOD-323	
BZT52C4V7S	200	4.70	4.47	4.94	78.0	5.0	5.0	1.0	SOD-323	
BZT52C5V1S	200	5.10	4.85	5.36	60.0	5.0	0.1	0.8	SOD-323	
BZT52C5V6S	200	5.60	5.32	5.88	40.0	5.0	0.1	1.0	SOD-323	
BZT52C6V2S	200	6.20	5.89	6.51	10.0	5.0	0.1	2.0	SOD-323	
BZT52C6V8S	200	6.80	6.46	7.14	8.0	5.0	0.1	3.0	SOD-323	
BZT52C7V5S	200	7.50	7.13	7.88	7.0	5.0	0.1	5.0	SOD-323	
BZT52C8V2S	200	8.20	7.79	8.61	7.0	5.0	0.1	6.0	SOD-323	
BZT52C8V7S	200	8.70	8.27	9.14	7.0	5.0	0.1	6.5	SOD-323	
BZT52C9V1S	200	9.10	8.65	9.56	10.0	5.0	0.1	7.0	SOD-323	
BZT52C10S	200	10.00	9.50	10.50	15.0	5.0	0.1	7.5	SOD-323	
BZT52C11S	200	11.00	10.45	11.55	20.0	5.0	0.1	8.5	SOD-323	
BZT52C12S	200	12.00	11.40	12.60	20.0	5.0	0.1	9.0	SOD-323	
BZT52C13S	200	13.00	12.35	13.65	25.0	5.0	0.1	10.0	SOD-323	
BZT52C14S	200	14.00	13.30	14.70	25.0	5.0	0.1	10.5	SOD-323	
BZT52C15S	200	15.00	14.25	15.75	30.0	5.0	0.1	11.0	SOD-323	
BZT52C16S	200	16.00	15.20	16.80	40.0	5.0	0.1	12.0	SOD-323	
BZT52C17S	200	17.00	16.15	17.85	40.0	5.0	0.1	13.0	SOD-323	
BZT52C18S	200	18.00	17.10	18.90	50.0	5.0	0.1	14.0	SOD-323	
BZT52C20S	200	20.00	19.00	21.00	50.0	5.0	0.1	15.0	SOD-323	
BZT52C22S	200	22.00	20.90	23.10	55.0	5.0	0.1	17.0	SOD-323	
BZT52C24S	200	24.00	22.80	25.20	80.0	5.0	0.1	18.0	SOD-323	
BZT52C27S	200	27.00	25.65	28.35	80.0	5.0	0.1	20.0	SOD-323	
BZT52C28S	200	28.00	26.60	29.40	80.0	5.0	0.1	22.0	SOD-323	
BZX584B5V1*	200	5.10	5.00	5.20	60.0	5.0	2.0	2.0	SOD-523	
BZX584B5V6*	200	5.60	5.49	5.71	40.0	5.0	1.0	2.0	SOD-523	
BZX584C1V8*	200	1.80	1.71	1.89	105.0	5.0	100.0	1.0	SOD-523	
BZX584C2V0*	200	2.00	1.90	2.10	105.0	5.0	100.0	1.0	SOD-523	
BZX584C2V4*	200	2.40	2.28	2.52	100.0	5.0	50.0	1.0	SOD-523	
BZX584C2V7*	200	2.70	2.57	2.84	100.0	5.0	20.0	1.0	SOD-523	
BZX584C3*	200	3.00	2.85	3.15	95.0	5.0	10.0	1.0	SOD-523	
BZX584C3V3*	200	3.30	3.14	3.47	95.0	5.0	5.0	1.0	SOD-523	
BZX584C3V6*	200	3.60	3.42	3.78	90.0	5.0	5.0	1.0	SOD-523	
BZX584C3V9*	200	3.90	3.71	4.10	90.0	5.0	3.0	1.0	SOD-523	
BZX584C4V3*	200	4.30	4.09	4.52	90.0	5.0	3.0	1.0	SOD-523	
BZX584C4V7*	200	4.70	4.47	4.94	80.0	5.0	3.0	2.0	SOD-523	
BZX584C5V1*	200	5.10	4.85	5.36	60.0	5.0	2.0	2.0	SOD-523	
BZX584C5V6*	200	5.60	5.32	5.88	40.0	5.0	1.0	2.0	SOD-523	
BZX584C6V2*	200	6.20	5.89	6.51	10.0	5.0	3.0	4.0	SOD-523	
BZX584C6V8*	200	6.80	6.46	7.14	15.0	5.0	2.0	4.0	SOD-523	
BZX584C7V5*	200	7.50	7.13	7.88	15.0	5.0	1.0	5.0	SOD-523	
BZX584C8V2*	200	8.20	7.79	8.61	15.0	5.0	0.7	5.0	SOD-523	
BZX584C8V7*	200	8.70	8.27	9.14	15.0	5.0	0.7	5.0	SOD-523	
BZX584C9V1*	200	9.10	8.65	9.56	15.0	5.0	0.5	6.0	SOD-523	
BZX584C10*	200	10.00	9.50	10.50	20.0	5.0	0.2	7.0	SOD-523	
BZX584C11*	200	11.00	10.45	11.55	20.0	5.0	0.1	8.0	SOD-523	
BZX584C12*	200	12.00	11.40	12.60	25.0	5.0	0.1	8.0	SOD-523	
BZX584C13*	200	13.00	12.35	13.65	30.0	5.0	0.1	8.0	SOD-523	
BZX584C14*	200	14.00	13.30	14.70	30.0	5.0	0.1	10.0	SOD-523	
BZX584C15*	200	15.00	14.25	15.75	30.0	5.0	0.1	10.5	SOD-523	
BZX584C16*	200	16.00	15.20	16.80	40.0	5.0	0.1	11.2	SOD-523	
BZX584C17*	200	17.00	16.15	17.85	40.0	5.0	0.1	12.2	SOD-523	
BZX584C18*	200	18.00	17.10	18.90	45.0	5.0	0.1	12.6	SOD-523	
BZX584C20*	200	20.00	19.00	21.00	55.0	5.0	0.1	14.0	SOD-523	
BZX584C22*	200	22.00	20.90	23.10	55.0	5.0	0.1	15.4	SOD-523	
BZX584C24*	200	24.00	22.80	25.20	70.0	5.0	0.1	16.8	SOD-523	
BZX584C27*	200	27.00	25.65	28.35	80.0	5.0	0.1	18.9	SOD-523	
BZX584C28*	200	28.00	26.60	29.40	80.0	5.0	0.1	20.5	SOD-523	

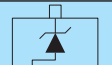
# DIODE

Part Number 	Power Dissipation	Zener Voltage Range			Zener Impedance		Reverse Leakage Current		Package	
		Pd	V <sub>Z</sub> @I <sub>ZT</sub>			MAX Z <sub>zT</sub> @I <sub>ZT</sub>		MAX I <sub>r</sub> @V <sub>r</sub>		
			mW	Nom. V	Min. V	Max. V	Ω	mA		μA
BZX84C1V8W*	200	1.80	1.71	1.89	105.0	5.0	100.0	1.0	SOT-323	
BZX84C2V0W*	200	2.00	1.90	2.10	105.0	5.0	100.0	1.0	SOT-323	
BZX84C2V4W*	200	2.40	2.28	2.52	100.0	5.0	50.0	1.0	SOT-323	
BZX84C2V7W*	200	2.70	2.57	2.84	100.0	5.0	20.0	1.0	SOT-323	
BZX84C3W*	200	3.00	2.85	3.15	95.0	5.0	10.0	1.0	SOT-323	
BZX84C3V3W*	200	3.30	3.14	3.47	95.0	5.0	5.0	1.0	SOT-323	
BZX84C3V6W*	200	3.60	3.42	3.78	90.0	5.0	5.0	1.0	SOT-323	
BZX84C3V9W*	200	3.90	3.71	4.10	90.0	5.0	3.0	1.0	SOT-323	
BZX84C4V3W*	200	4.30	4.09	4.52	90.0	5.0	3.0	1.0	SOT-323	
BZX84C4V7W*	200	4.70	4.47	4.94	80.0	5.0	3.0	2.0	SOT-323	
BZX84C5V1W*	200	5.10	4.85	5.36	60.0	5.0	2.0	2.0	SOT-323	
BZX84C5V6W*	200	5.60	5.32	5.88	40.0	5.0	1.0	2.0	SOT-323	
BZX84C6V2W*	200	6.20	5.89	6.51	10.0	5.0	3.0	4.0	SOT-323	
BZX84C6V8W*	200	6.80	6.46	7.14	15.0	5.0	2.0	4.0	SOT-323	
BZX84C7V5W*	200	7.50	7.13	7.88	15.0	5.0	1.0	5.0	SOT-323	
BZX84C8V2W*	200	8.20	7.79	8.61	15.0	5.0	0.7	5.0	SOT-323	
BZX84C8V7W*	200	8.70	8.27	9.14	15.0	5.0	0.7	5.0	SOT-323	
BZX84C9V1W*	200	9.10	8.65	9.56	15.0	5.0	0.5	6.0	SOT-323	
BZX84C10W*	200	10.00	9.50	10.50	20.0	5.0	0.2	7.0	SOT-323	
BZX84C11W*	200	11.00	10.45	11.55	20.0	5.0	0.1	8.0	SOT-323	
BZX84C12W*	200	12.00	11.40	12.60	25.0	5.0	0.1	8.0	SOT-323	
BZX84C13W*	200	13.00	12.35	13.65	30.0	5.0	0.1	8.0	SOT-323	
BZX84C14W*	200	14.00	13.30	14.70	30.0	5.0	0.1	10.0	SOT-323	
BZX84C15W*	200	15.00	14.25	15.75	30.0	5.0	0.1	10.5	SOT-323	
BZX84C16W*	200	16.00	15.20	16.80	40.0	5.0	0.1	11.2	SOT-323	
BZX84C17W*	200	17.00	16.15	17.85	40.0	5.0	0.1	12.2	SOT-323	
BZX84C18W*	200	18.00	17.10	18.90	45.0	5.0	0.1	12.6	SOT-323	
BZX84C20W*	200	20.00	19.00	21.00	55.0	5.0	0.1	14.0	SOT-323	
BZX84C22W*	200	22.00	20.90	23.10	55.0	5.0	0.1	15.4	SOT-323	
BZX84C24W*	200	24.00	22.80	25.20	70.0	5.0	0.1	16.8	SOT-323	
BZX84C27W*	200	27.00	25.65	28.35	80.0	5.0	0.1	18.9	SOT-323	
BZX84C28W*	200	28.00	26.60	29.40	80.0	5.0	0.1	20.5	SOT-323	


Part Number 	Power Dissipation	Zener Voltage Range			Zener Impedance		Reverse Leakage Current		Package	
		Pd	V <sub>Z</sub> @I <sub>ZT</sub>			MAX Z <sub>zT</sub> @I <sub>ZT</sub>		MAX I <sub>r</sub> @V <sub>r</sub>		
			mW	Nom. V	Min. V	Max. V	Ω	mA		μA
UMMSZ5219BS	200	1.80	1.71	1.89	50.0	20.0	150.0	1.0	SOD-323	
UMMSZ5220BS	200	2.00	1.90	2.10	50.0	20.0	150.0	1.0	SOD-323	
UMMSZ5221BS	200	2.40	2.28	2.52	30.0	20.0	100.0	1.0	SOD-323	
UMMSZ5222BS	200	2.50	2.38	2.63	30.0	20.0	100.0	1.0	SOD-323	
UMMSZ5223BS	200	2.70	2.57	2.84	30.0	20.0	75.0	1.0	SOD-323	
UMMSZ5225BS	200	3.00	2.85	3.15	30.0	20.0	50.0	1.0	SOD-323	
UMMSZ5226BS	200	3.30	3.14	3.47	28.0	20.0	25.0	1.0	SOD-323	
UMMSZ5227BS	200	3.60	3.42	3.78	24.0	20.0	15.0	1.0	SOD-323	
UMMSZ5228BS	200	3.90	3.71	4.10	23.0	20.0	10.0	1.0	SOD-323	
UMMSZ5229BS	200	4.30	4.09	4.52	22.0	20.0	5.0	1.0	SOD-323	
UMMSZ5230BS	200	4.70	4.47	4.94	19.0	20.0	5.0	2.0	SOD-323	
UMMSZ5231BS	200	5.10	4.85	5.36	17.0	20.0	5.0	2.0	SOD-323	
UMMSZ5232BS	200	5.60	5.32	5.88	11.0	20.0	5.0	3.0	SOD-323	
UMMSZ5234BS	200	6.20	5.89	6.51	7.0	20.0	5.0	4.0	SOD-323	
UMMSZ5235BS	200	6.80	6.46	7.14	5.0	20.0	3.0	5.0	SOD-323	
UMMSZ5236BS	200	7.50	7.13	7.88	6.0	20.0	3.0	6.0	SOD-323	
UMMSZ5237BS	200	8.20	7.79	8.61	8.0	20.0	3.0	6.0	SOD-323	
UMMSZ5238BS	200	8.70	8.27	9.14	8.0	20.0	3.0	6.5	SOD-323	
UMMSZ5239BS	200	9.10	8.65	9.56	10.0	20.0	3.0	6.5	SOD-323	
UMMSZ5240BS	200	10.00	9.50	10.50	17.0	20.0	3.0	8.0	SOD-323	
UMMSZ5241BS	200	11.00	10.45	11.55	22.0	20.0	2.0	8.4	SOD-323	
UMMSZ5242BS	200	12.00	11.40	12.60	30.0	20.0	1.0	9.1	SOD-323	
UDZ5G12B*	200	12.00	11.74	12.24	30.0	5.0	0.1	12.0	SOD-323	
UMMSZ5243BS	200	13.00	12.35	13.65	13.0	9.5	0.5	9.9	SOD-323	
UMMSZ5244BS	200	14.00	13.30	14.70	15.0	9.0	0.1	10.5	SOD-323	
UMMSZ5245BS	200	15.00	14.25	15.75	16.0	8.5	0.1	11.0	SOD-323	
UMMSZ5246BS	200	16.00	15.20	16.80	17.0	7.8	0.1	12.0	SOD-323	
UMMSZ5247BS	200	17.00	16.15	17.85	19.0	7.5	0.1	13.0	SOD-323	
UMMSZ5248BS	200	18.00	17.10	18.90	21.0	7.0	0.1	14.0	SOD-323	
UMMSZ5250BS	200	20.00	19.00	21.00	25.0	6.2	0.1	15.0	SOD-323	
UMMSZ5251BS	200	22.00	20.90	23.10	29.0	5.6	0.1	17.0	SOD-323	
UMMSZ5252BS	200	24.00	22.80	25.20	33.0	5.2	0.1	18.0	SOD-323	
UMMSZ5254BS	200	27.00	25.65	28.35	41.0	5.0	0.1	21.0	SOD-323	
UMMSZ5255BS	200	28.00	26.60	29.40	44.0	4.5	0.1	21.0	SOD-323	


# DIODE

Part Number 	Power Dissipation	Zener Voltage Range			Zener Impedance		Reverse Leakage Current		Package	
		Pd	V <sub>Z</sub> @I <sub>ZT</sub>			MAX Z <sub>ZT</sub> @I <sub>ZT</sub>		MAX I <sub>R</sub> @V <sub>R</sub>		
			mW	Nom. V	Min. V	Max. V	Ω	mA		μA
MMBZ5219BV*	200	1.80	1.71	1.89	50.0	20.0	150.0	1.0	SOD-523	
MMBZ5220BV*	200	2.00	1.90	2.10	50.0	20.0	150.0	1.0	SOD-523	
MMBZ5221BV*	200	2.40	2.28	2.52	30.0	20.0	100.0	1.0	SOD-523	
MMBZ5222BV*	200	2.50	2.38	2.63	30.0	20.0	100.0	1.0	SOD-523	
MMBZ5223BV*	200	2.70	2.57	2.84	30.0	20.0	75.0	1.0	SOD-523	
MMBZ5225BV*	200	3.00	2.85	3.15	30.0	20.0	50.0	1.0	SOD-523	
MMBZ5226BV*	200	3.30	3.14	3.47	28.0	20.0	25.0	1.0	SOD-523	
MMBZ5227BV*	200	3.60	3.42	3.78	24.0	20.0	15.0	1.0	SOD-523	
MMBZ5228BV*	200	3.90	3.71	4.10	23.0	20.0	10.0	1.0	SOD-523	
MMBZ5229BV*	200	4.30	4.09	4.52	22.0	20.0	5.0	1.0	SOD-523	
MMBZ5230BV*	200	4.70	4.47	4.94	19.0	20.0	5.0	2.0	SOD-523	
MMBZ5231BV*	200	5.10	4.85	5.36	17.0	20.0	5.0	2.0	SOD-523	
MMBZ5232BV*	200	5.60	5.32	5.88	11.0	20.0	5.0	3.0	SOD-523	
MMBZ5234BV*	200	6.20	5.89	6.51	7.0	20.0	5.0	4.0	SOD-523	
MMBZ5235BV*	200	6.80	6.46	7.14	5.0	20.0	3.0	5.0	SOD-523	
MMBZ5236BV*	200	7.50	7.13	7.88	6.0	20.0	3.0	6.0	SOD-523	
MMBZ5237BV*	200	8.20	7.79	8.61	8.0	20.0	3.0	6.5	SOD-523	
MMBZ5238BV*	200	8.70	8.27	9.14	8.0	20.0	3.0	6.5	SOD-523	
MMBZ5239BV*	200	9.10	8.65	9.56	10.0	20.0	3.0	7.0	SOD-523	
MMBZ5240BV*	200	10.00	9.50	10.50	17.0	20.0	3.0	8.0	SOD-523	
MMBZ5241BV*	200	11.00	10.45	11.55	22.0	20.0	2.0	8.4	SOD-523	
MMBZ5242BV*	200	12.00	11.40	12.60	30.0	20.0	1.0	9.1	SOD-523	
MMBZ5243BV*	200	13.00	12.35	13.65	13.0	9.5	0.5	9.9	SOD-523	
MMBZ5244BV*	200	14.00	13.30	14.70	15.0	9.0	0.1	10.5	SOD-523	
MMBZ5245BV*	200	15.00	14.25	15.75	16.0	8.5	0.1	11.0	SOD-523	
MMBZ5246BV*	200	16.00	15.20	16.80	17.0	7.8	0.1	12.0	SOD-523	
MMBZ5247BV*	200	17.00	16.15	17.85	19.0	7.5	0.1	13.0	SOD-523	
MMBZ5248BV*	200	18.00	17.10	18.90	21.0	7.0	0.1	14.0	SOD-523	
MMBZ5250BV*	200	20.00	19.00	21.00	25.0	6.2	0.1	15.0	SOD-523	
MMBZ5251BV*	200	22.00	20.90	23.10	29.0	5.6	0.1	17.0	SOD-523	
MMBZ5252BV*	200	24.00	22.80	25.20	33.0	5.2	0.1	18.0	SOD-523	
MMBZ5254BV*	200	27.00	25.65	28.35	41.0	5.0	0.1	21.0	SOD-523	
MMBZ5255BV*	200	28.00	26.60	29.40	44.0	4.5	0.1	21.0	SOD-523	

Part Number 	Power Dissipation	Zener Voltage Range			Zener Impedance		Reverse Leakage Current		Package	
		Pd	V <sub>Z</sub> @I			MAX Z <sub>Z</sub> @I		MAX I <sub>R</sub> @V <sub>R</sub>		
			mW	Nom. V	Min. V	Max. V	Ω	mA		μA
MMBZ5219BW*	200	1.80	1.71	1.89	50.0	20.0	150.0	1.0	SOT-323	
MMBZ5220BW*	200	2.00	1.90	2.10	50.0	20.0	150.0	1.0	SOT-323	
MMBZ5221BW*	200	2.40	2.28	2.52	30.0	20.0	100.0	1.0	SOT-323	
MMBZ5222BW*	200	2.50	2.38	2.63	30.0	20.0	100.0	1.0	SOT-323	
MMBZ5223BW*	200	2.70	2.57	2.84	30.0	20.0	75.0	1.0	SOT-323	
MMBZ5225BW*	200	2.80	2.66	2.94	30.0	20.0	75.0	1.0	SOT-323	
MMBZ5227BW*	200	3.00	2.85	3.15	30.0	20.0	50.0	1.0	SOT-323	
MMBZ5228BW*	200	3.30	3.14	3.47	28.0	20.0	25.0	1.0	SOT-323	
MMBZ5230BW*	200	3.60	3.42	3.78	24.0	20.0	15.0	1.0	SOT-323	
MMBZ5232BW*	200	3.90	3.71	4.10	23.0	20.0	10.0	1.0	SOT-323	
MMBZ5233BW*	200	4.30	4.09	4.52	22.0	20.0	5.0	1.0	SOT-323	
MMBZ5234BW*	200	4.70	4.47	4.94	19.0	20.0	5.0	2.0	SOT-323	
MMBZ5235BW*	200	5.10	4.85	5.36	17.0	20.0	5.0	2.0	SOT-323	
MMBZ5237BW*	200	5.60	5.32	5.88	11.0	20.0	5.0	3.0	SOT-323	
MMBZ5239BW*	200	6.00	5.70	6.30	7.0	20.0	5.0	3.5	SOT-323	
MMBZ5241BW*	200	6.20	5.89	6.51	7.0	20.0	5.0	4.0	SOT-323	
MMBZ5242BW*	200	6.80	6.46	7.14	5.0	20.0	3.0	5.0	SOT-323	
MMBZ5243BW*	200	7.50	7.13	7.88	6.0	20.0	3.0	6.0	SOT-323	
MMBZ5245BW*	200	8.20	7.79	8.61	8.0	20.0	3.0	6.0	SOT-323	
MMBZ5247BW*	200	8.70	8.27	9.14	8.0	20.0	3.0	6.5	SOT-323	
MMBZ5248BW*	200	9.10	8.65	9.56	10.0	20.0	3.0	6.5	SOT-323	
MMBZ5249BW*	200	10.00	9.50	10.50	17.0	20.0	3.0	8.0	SOT-323	
MMBZ5250BW*	200	11.00	10.45	11.55	22.0	20.0	2.0	8.4	SOT-323	
MMBZ5252BW*	200	12.00	11.40	12.60	30.0	20.0	1.0	9.1	SOT-323	
MMBZ5253BW*	200	13.00	12.35	13.65	13.0	9.5	0.5	9.9	SOT-323	
MMBZ5254BW*	200	14.00	13.30	14.70	15.0	9.0	0.1	10.5	SOT-323	
	200	15.00	14.25	15.75	16.0	8.5	0.1	11.0		
	200	16.00	15.20	16.80	17.0	7.8	0.1	12.0		
	200	17.00	16.15	17.85	19.0	7.5	0.1	13.0		
	200	18.00	17.10	18.90	21.0	7.0	0.1	14.0		
	200	19.00	18.05	19.95	23.0	6.6	0.1	14.0		
	200	20.00	19.00	21.00	25.0	6.2	0.1	15.0		
	200	22.00	20.90	23.10	29.0	5.6	0.1	17.0		
	200	24.00	22.80	25.20	33.0	5.2	0.1	18.0		
	200	25.00	23.75	26.25	35.0	5.0	0.1	19.0		
	200	27.00	25.65	28.35	41.0	5.0	0.1	21.0		
	200	28.00	26.60	29.40	44.0	4.5	0.1	21.0		

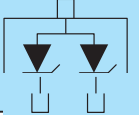
# DIODE

Part Number 	Power Dissipation	Zener Voltage Range			Zener Impedance		Reverse Leakage Current		Package	
		Pd	V <sub>Z</sub> @I <sub>ZT</sub>			MAX Z <sub>ZT</sub> @I <sub>ZT</sub>		MAX I <sub>R</sub> @V <sub>R</sub>		
			mW	Nom. V	Min. V	Max. V	Ω	mA		μA
MMBZ5219B*	400	1.80	1.71	1.89	50.0	20.0	150.0	1.0	SOT-23	
MMBZ5220B*	400	2.00	1.90	2.10	50.0	20.0	150.0	1.0	SOT-23	
MMBZ5221B*	410	2.40	2.28	2.52	30.0	20.0	100.0	1.0	SOT-23	
MMBZ5222B*	410	2.50	2.38	2.63	30.0	20.0	100.0	1.0	SOT-23	
MMBZ5223B*	410	2.70	2.57	2.84	30.0	20.0	75.0	1.0	SOT-23	
MMBZ5224B*	410	2.80	2.66	2.94	30.0	20.0	75.0	1.0	SOT-23	
MMBZ5225B*	410	3.00	2.85	3.15	30.0	20.0	50.0	1.0	SOT-23	
MMBZ5226B*	410	3.30	3.14	3.47	28.0	20.0	25.0	1.0	SOT-23	
MMBZ5227B*	410	3.60	3.42	3.78	24.0	20.0	15.0	1.0	SOT-23	
MMBZ5228B*	410	3.90	3.71	4.10	23.0	20.0	10.0	1.0	SOT-23	
MMBZ5229B*	410	4.30	4.09	4.52	22.0	20.0	5.0	1.0	SOT-23	
MMBZ5230B*	410	4.70	4.47	4.94	19.0	20.0	5.0	2.0	SOT-23	
MMBZ5231B*	410	5.10	4.85	5.36	17.0	20.0	5.0	2.0	SOT-23	
MMBZ5232B*	410	5.60	5.32	5.88	11.0	20.0	5.0	3.0	SOT-23	
MMBZ5233B*	410	6.00	5.70	6.30	7.0	20.0	5.0	4.0	SOT-23	
MMBZ5234B*	410	6.20	5.89	6.51	7.0	20.0	5.0	4.0	SOT-23	
MMBZ5235B*	410	6.80	6.46	7.14	5.0	20.0	3.0	5.0	SOT-23	
MMBZ5236B*	410	7.50	7.13	7.88	6.0	20.0	3.0	6.0	SOT-23	
MMBZ5237B*	410	8.20	7.79	8.61	8.0	20.0	3.0	6.0	SOT-23	
MMBZ5238B*	410	8.70	8.27	9.14	8.0	20.0	3.0	6.5	SOT-23	
MMBZ5239B*	410	9.10	8.65	9.56	10.0	20.0	3.0	6.5	SOT-23	
MMBZ5240B*	410	10.00	9.50	10.50	17.0	20.0	3.0	8.0	SOT-23	
MMBZ5241B*	410	11.00	10.45	11.55	22.0	20.0	2.0	8.4	SOT-23	
MMBZ5242B*	410	12.00	11.40	12.60	30.0	20.0	1.0	9.1	SOT-23	
MMBZ5243B*	410	13.00	12.35	13.65	13.0	9.5	0.5	9.9	SOT-23	
MMBZ5244B*	410	14.00	13.30	14.70	15.0	9.0	0.1	10.5	SOT-23	
MMBZ5245B*	410	15.00	14.25	15.75	16.0	8.5	0.1	11.0	SOT-23	
MMBZ5246B*	410	16.00	15.20	16.80	17.0	7.8	0.1	12.0	SOT-23	
MMBZ5247B*	410	17.00	16.15	17.85	19.0	7.5	0.1	13.0	SOT-23	
MMBZ5248B*	410	18.00	17.10	18.90	21.0	7.0	0.1	14.0	SOT-23	
MMBZ5249B*	410	19.00	18.05	19.95	23.0	6.6	0.1	14.0	SOT-23	
MMBZ5250B*	410	20.00	19.00	21.00	25.0	6.2	0.1	15.0	SOT-23	
MMBZ5251B*	410	22.00	20.90	23.10	29.0	5.6	0.1	17.0	SOT-23	
MMBZ5252B*	410	24.00	22.80	25.20	33.0	5.2	0.1	18.0	SOT-23	
MMBZ5253B*	410	25.00	23.75	26.25	35.0	5.0	0.1	19.0	SOT-23	
MMBZ5254B*	410	27.00	25.65	28.35	41.0	5.0	0.1	21.0	SOT-23	
MMBZ5255B*	410	28.00	26.60	29.40	44.0	4.5	0.1	21.0	SOT-23	


Part Number 	Power Dissipation	Zener Voltage Range			Zener Impedance		Reverse Leakage Current		Package	
		Pd	V <sub>Z</sub> @I <sub>ZT</sub>			MAX Z <sub>ZT</sub> @I <sub>ZT</sub>		MAX I <sub>R</sub> @V <sub>R</sub>		
			mW	Nom. V	Min. V	Max. V	Ω	mA		μA
UMMSZ5219B	500	1.80	1.71	1.89	50.0	20.0	150.0	1.0	SOT-123	
UMMSZ5220B	500	2.00	1.90	2.10	50.0	20.0	150.0	1.0	SOT-123	
UMMSZ5221B	500	2.40	2.28	2.52	30.0	20.0	100.0	1.0	SOD-123	
UMMSZ5222B	500	2.50	2.38	2.63	30.0	20.0	100.0	1.0	SOD-123	
UMMSZ5223B	500	2.70	2.57	2.84	30.0	20.0	75.0	1.0	SOD-123	
UMMSZ5224B	500	2.80	2.66	2.94	30.0	20.0	75.0	1.0	SOD-123	
UMMSZ5225B	500	3.00	2.85	3.15	30.0	20.0	50.0	1.0	SOD-123	
UMMSZ5226B	500	3.30	3.14	3.47	28.0	20.0	25.0	1.0	SOD-123	
UMMSZ5227B	500	3.60	3.42	3.78	24.0	20.0	15.0	1.0	SOD-123	
UMMSZ5228B	500	3.90	3.71	4.10	23.0	20.0	10.0	1.0	SOD-123	
UMMSZ5229B	500	4.30	4.09	4.52	22.0	20.0	5.0	1.0	SOD-123	
UMMSZ5230B	500	4.70	4.47	4.94	19.0	20.0	5.0	2.0	SOD-123	
UMMSZ5231B	500	5.10	4.85	5.36	17.0	20.0	5.0	2.0	SOD-123	
UMMSZ5232B	500	5.60	5.32	5.88	11.0	20.0	5.0	3.0	SOD-123	
UMMSZ5233B	500	6.00	5.70	6.30	7.0	20.0	5.0	3.5	SOD-123	
UMMSZ5234B	500	6.20	5.89	6.51	7.0	20.0	5.0	4.0	SOD-123	
UMMSZ5235B	500	6.80	6.46	7.14	5.0	20.0	3.0	5.0	SOD-123	
UMMSZ5236B	500	7.50	7.13	7.88	6.0	20.0	3.0	6.0	SOD-123	
UMMSZ5237B	500	8.20	7.79	8.61	8.0	20.0	3.0	6.0	SOD-123	
UMMSZ5238B	500	8.70	8.27	9.14	8.0	20.0	3.0	6.5	SOD-123	
UMMSZ5239B	500	9.10	8.65	9.56	10.0	20.0	3.0	6.5	SOD-123	
UMMSZ5240B	500	10.00	9.50	10.50	17.0	20.0	3.0	8.0	SOD-123	
UMMSZ5241B	500	11.00	10.45	11.55	22.0	20.0	2.0	8.4	SOD-123	
UMMSZ5242B	500	12.00	11.40	12.60	30.0	20.0	1.0	9.1	SOD-123	
UMMSZ5243B	500	13.00	12.35	13.65	13.0	9.5	0.5	9.9	SOD-123	
UMMSZ5244B	500	14.00	13.30	14.70	15.0	9.0	0.1	10.5	SOD-123	
UMMSZ5245B	500	15.00	14.25	15.75	16.0	8.5	0.1	11.0	SOD-123	
UMMSZ5246B	500	16.00	15.20	16.80	17.0	7.8	0.1	12.0	SOD-123	
UMMSZ5247B	500	17.00	16.15	17.85	19.0	7.5	0.1	13.0	SOD-123	
UMMSZ5248B	500	18.00	17.10	18.90	21.0	7.0	0.1	14.0	SOD-123	
UMMSZ5249B	500	19.00	18.05	19.95	23.0	7.0	0.1	14.0	SOD-123	
UMMSZ5250B	500	20.00	19.00	21.00	25.0	6.2	0.1	15.0	SOD-123	
UMMSZ5251B	500	22.00	20.90	23.10	29.0	5.6	0.1	17.0	SOD-123	
UMMSZ5252B	500	24.00	22.80	25.20	33.0	5.2	0.1	18.0	SOD-123	
UMMSZ5253B	500	25.00	23.75	26.25	35.0	5.0	0.1	21.0	SOD-123	
UMMSZ5254B	500	27.00	25.65	28.35	41.0	5.0	0.1	21.0	SOD-123	
UMMSZ5255B	500	28.00	26.60	29.40	44.0	4.5	0.1	21.0	SOD-123	



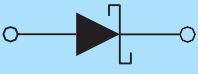
## Dual Zener Diode

Part Number 	Power Dissipation Pd mW	Zener Voltage Range			Zener Impedance		Reverse Leakage Current		Package
		V @ I <sub>Z</sub>			MAX Z @ I <sub>ZT</sub>		MAX I <sub>R</sub> @ V <sub>R</sub>		
		Nom. V	Min. V	Max. V	mA	μA	V		
AZ23C1V8*	300	1.8	1.79	1.91	90.0	5.0	150.0	1.0	SOT-23
AZ23C2V0*	300	2.0	1.90	2.10	90.0	5.0	150.0	1.0	SOT-23
AZ23C2V4*	300	2.4	2.28	2.52	85.0	5.0	100.0	1.0	SOT-23
AZ23C2V7*	300	2.7	2.57	2.84	83.0	5.0	75.0	1.0	SOT-23
AZ23C3V0*	300	3.0	2.85	3.15	95.0	5.0	50.0	1.0	SOT-23
AZ23C3V3*	300	3.3	3.14	3.47	95.0	5.0	25.0	1.0	SOT-23
AZ23C3V6*	300	3.6	3.42	3.78	90.0	5.0	5.0	1.0	SOT-23
AZ23C3V9*	300	3.9	3.71	4.10	90.0	5.0	3.0	1.0	SOT-23
AZ23C4V3*	300	4.3	4.09	4.52	95.0	5.0	5.0	1.0	SOT-23
AZ23C4V7*	300	4.7	4.47	4.94	78.0	5.0	5.0	5.0	SOT-23
AZ23C5V1*	300	5.1	4.85	5.36	60.0	5.0	0.1	0.8	SOT-23
AZ23C5V6*	300	5.6	5.32	5.88	40.0	5.0	0.1	1.0	SOT-23
AZ23C6V2*	300	6.2	5.89	6.51	10.0	5.0	0.1	2.0	SOT-23
AZ23C6V8*	300	6.8	6.46	7.14	8.0	5.0	0.1	3.0	SOT-23
AZ23C7V5*	300	7.5	7.13	7.88	7.0	5.0	0.1	5.0	SOT-23
AZ23C8V2*	300	8.2	7.79	8.61	7.0	5.0	0.1	6.0	SOT-23
AZ23C8V7*	300	8.7	8.27	9.14	7.0	5.0	0.1	6.5	SOT-23
AZ23C9V1*	300	9.1	8.65	9.56	10.0	5.0	0.1	7.0	SOT-23
AZ23C10*	300	10.0	9.50	10.50	15.0	5.0	0.1	7.5	SOT-23
AZ23C11*	300	11.0	10.45	11.55	20.0	5.0	0.1	8.5	SOT-23
AZ23C12*	300	12.0	11.40	12.60	20.0	5.0	0.1	9.0	SOT-23
AZ23C13*	300	13.0	12.35	13.65	25.0	5.0	0.1	10.0	SOT-23
AZ23C14*	300	14.0	13.30	14.70	25.0	5.0	0.1	10.5	SOT-23
AZ23C15*	300	15.0	14.25	15.75	30.0	5.0	0.1	11.0	SOT-23
AZ23C16*	300	16.0	15.20	16.80	40.0	5.0	0.1	12.0	SOT-23
AZ23C17*	300	17.0	16.15	17.85	40.0	5.0	0.1	13.0	SOT-23
AZ23C18*	300	18.0	17.10	18.90	50.0	5.0	0.1	14.0	SOT-23
AZ23C20*	300	20.0	19.00	21.00	50.0	5.0	0.1	15.0	SOT-23
AZ23C22*	300	22.0	20.90	23.10	55.0	5.0	0.1	17.0	SOT-23
AZ23C24*	300	24.0	22.80	25.20	80.0	5.0	0.1	18.0	SOT-23
AZ23C27*	300	27.0	25.65	28.35	80.0	5.0	0.1	20.0	SOT-23
AZ23C28*	300	28.0	26.60	29.40	80.0	5.0	0.1	22.0	SOT-23


# DIODE

Part Number 	Power Dissipation $P_d$	Zener Voltage Range			Zener Impedance		Reverse Leakage Current		Package
		$V @ I_Z$			$MAX Z @ I_Z$		$MAX I @ V_R$		
	mW	Nom. V	Min. V	Max. V	fi	mA	$\mu A$	V	
DZ23C1V8	300	1.8	1.79	1.91	90.0	5.0	150.0	1.0	SOT-23
DZ23C2V0	300	2.0	1.90	2.10	90.0	5.0	150.0	1.0	SOT-23
DZ23C2V4	300	2.4	2.28	2.52	85.0	5.0	100.0	1.0	SOT-23
DZ23C2V7	300	2.7	2.57	2.84	83.0	5.0	75.0	1.0	SOT-23
DZ23C3V0	300	3.0	2.85	3.15	95.0	5.0	50.0	1.0	SOT-23
DZ23C3V3	300	3.3	3.14	3.47	95.0	5.0	25.0	1.0	SOT-23
DZ23C3V6	300	3.6	3.42	3.78	90.0	5.0	5.0	1.0	SOT-23
DZ23C3V9	300	3.9	3.71	4.10	90.0	5.0	3.0	1.0	SOT-23
DZ23C4V3	300	4.3	4.09	4.52	95.0	5.0	5.0	1.0	SOT-23
DZ23C4V7	300	4.7	4.47	4.94	78.0	5.0	5.0	1.0	SOT-23
DZ23C5V1	300	5.1	4.85	5.36	60.0	5.0	0.1	0.8	SOT-23
DZ23C5V6	300	5.6	5.32	5.88	40.0	5.0	0.1	1.0	SOT-23
DZ23C6V2	300	6.2	5.89	6.51	10.0	5.0	0.1	2.0	SOT-23
DZ23C6V8	300	6.8	6.46	7.14	8.0	5.0	0.1	3.0	SOT-23
DZ23C7V5	300	7.5	7.13	7.88	7.0	5.0	0.1	5.0	SOT-23
DZ23C8V2	300	8.2	7.79	8.61	7.0	5.0	0.1	6.0	SOT-23
DZ23C8V7	300	8.7	8.27	9.14	7.0	5.0	0.1	6.5	SOT-23
DZ23C9V1	300	9.1	8.65	9.56	10.0	5.0	0.1	7.0	SOT-23
DZ23C10	300	10.0	9.50	10.50	15.0	5.0	0.1	7.5	SOT-23
DZ23C11	300	11.0	10.45	11.55	20.0	5.0	0.1	8.5	SOT-23
DZ23C12	300	12.0	11.40	12.60	20.0	5.0	0.1	9.0	SOT-23
DZ23C13	300	13.0	12.35	13.65	25.0	5.0	0.1	10.0	SOT-23
DZ23C14	300	14.0	13.30	14.70	25.0	5.0	0.1	10.5	SOT-23
DZ23C15	300	15.0	14.25	15.75	30.0	5.0	0.1	11.0	SOT-23
DZ23C16	300	16.0	15.20	16.80	40.0	5.0	0.1	12.0	SOT-23
DZ23C17	300	17.0	16.15	17.85	40.0	5.0	0.1	13.0	SOT-23
DZ23C18	300	18.0	17.10	18.90	50.0	5.0	0.1	14.0	SOT-23
DZ23C20	300	20.0	19.00	21.00	50.0	5.0	0.1	15.0	SOT-23
DZ23C22	300	22.0	20.90	23.10	55.0	5.0	0.1	17.0	SOT-23
DZ23C24	300	24.0	22.80	25.20	80.0	5.0	0.1	18.0	SOT-23
DZ23C27	300	27.0	25.65	28.35	80.0	5.0	0.1	20.0	SOT-23
DZ23C28	300	28.0	26.60	29.40	80.0	5.0	0.1	22.0	SOT-23


## Schottky Diode

 Part Number	Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°C)				Package
	I <sub>o</sub>	V <sub>RM</sub> (V <sub>R</sub> )	I <sub>FSM</sub>	V <sub>FM</sub>		I <sub>RM</sub> (I <sub>R</sub> )		
				Rating	Conditions	Rating	Conditions	
	(A)	(V)	(A)	MAX. (V)	IF(A)	MAX. (μA)	V <sub>R</sub> (V)	
1N5819	1.0	40	25.0	0.60	1.0	1000	40	SOD-123
1N5822*	3.0	40	80.0	0.525	3.0	2000	40	DO-201AD
SR23*	2.0	30	50.0	0.50	2.0	500	30	SMA SMB
SR24	2.0	40	50.0	0.50	2.0	500	40	SMA SMB
SR26*	2.0	60	50.0	0.70	2.0	500	60	SMA SMB
SK23*	2.0	30	50.0	0.50	2.0	500	30	SMA SMB
SK24	2.0	40	50.0	0.50	2.0	500	40	SMA SMB
SK26*	2.0	60	50.0	0.70	2.0	500	60	SMA SMB
SK210*	2.0	100	50.0	0.85	2.0	500	100	SMA SMB
SK33*	3.0	30	100.0	0.50	3.0	500	30	SMC
SK34	3.0	40	100.0	0.50	3.0	500	40	SMC
SK36	3.0	60	100.0	0.70	3.0	500	60	SMC
SK310	3.0	100	100.0	0.85	3.0	500	100	SMC
SK53*	5.0	30	100.0	0.50	5.0	500	30	SMC
SK54	5.0	40	100.0	0.50	5.0	500	40	SMC
SK56*	5.0	60	100.0	0.75	5.0	500	60	SMC
SK510*	5.0	100	100.0	0.85	5.0	500	100	SMC
SK83*	8.0	30	200.0	0.55	8.0	1000	30	SMC
SK84*	8.0	40	200.0	0.55	8.0	1000	40	SMC
SK86	8.0	60	200.0	0.65	8.0	1000	60	SMC
SK810*	8.0	100	200.0	0.85	8.0	1000	100	SMC
MBR0530	0.5	30	5.5	0.43	0.5	130	45	SOD-123 SOD-323
MBR0545	0.5	45	5.5	0.51	0.5	20	40	SOD-123 SOD-323
MBR0560	0.5	60	5.5	0.70	0.5	200	60	SOD-123 SOD-323
MBR130*	1.0	30	12.0	0.42	1.0	1000	30	SOD-123
MBR145	1.0	45	16.0	0.55	1.0	40	45	SOD-123
MBR160	1.0	60	30.0	0.70	1.0	500	60	SMA SMB
MBR1100	1.0	100	30.0	0.79	1.0	500	100	SMA SMB
MBR230*	2.0	30	50.0	0.50	2.0	500	30	SMA SMB
MBR245	2.0	45	50.0	0.50	2.0	500	45	SMA SMB
MBR260	2.0	60	50.0	0.70	2.0	500	60	SMA SMB
MBR2100*	2.0	100	50.0	0.79	2.0	7	100	SMA SMB
MBR340	3.0	40	80.0	0.60	3.0	100	40	DO-201AD SMA SMB SMC
MBR360	3.0	60	100.0	0.70	3.0	500	60	DO-201AD SMA SMB SMC
MBR3100*	3.0	100	100.0	0.79	3.0	500	100	DO-201AD SMA SMB SMC


# DIODE

 Part Number	Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°)				Package
	I <sub>O</sub>	V <sub>RM</sub> (V <sub>R</sub> )	I <sub>FSM</sub>	V <sub>FM</sub>		I <sub>RM</sub> (I <sub>R</sub> )		
				Rating	Conditions	Rating	Conditions	
	(A)	(V)	(A)	MAX. (V)	IF(A)	MAX. (μA)	V <sub>R</sub> (V)	
MBR545	5.0	45	100.0	0.55	5.0	500	45	DO-201AD SMC
MBR560*	5.0	60	100.0	0.70	5.0	500	60	DO-201AD SMC
MBR730*	7.5	30	150.0	0.75	7.5	100	30	TO-220-2
MBR745*	7.5	45	150.0	0.75	7.5	100	45	TO-220-2
MBR760*	7.5	60	150.0	0.75	7.5	500	60	TO-220-2
MBR1030*	10.0	30	150.0	0.84	10.0	100	30	TO-220-2
MBR1045	10.0	45	150.0	0.84	10.0	100	45	TO-220-2
MBR1060*	10.0	60	150.0	0.95	10.0	100	60	TO-220-2
MBR1645*	16.0	45	150.0	0.63	16.0	200	45	TO-220-2
MBR1660*	16.0	60	150.0	0.75	16.0	100	60	TO-220-2
SB130*	1.0	30	30.0	0.50	1.0	500	30	DO-41 SMA SMB
SB130S*	1.0	30	25.0	0.41	1.0	1000	30	DO-41 SMA SMB
SB140	1.0	40	30.0	0.50	1.0	500	40	DO-41 SMA SMB
SB160	1.0	60	30.0	0.70	1.0	500	60	DO-41 SMA SMB
SB1100*	1.0	100	30.0	0.79	1.0	500	100	DO-41 SMA SMB
SB1200*	1.0	200	30.0	0.85	1.0	200	100	DO-41 SMA SMB
SB230*	2.0	30	50.0	0.50	2.0	500	30	DO-41 SMA SMB
SB240	2.0	40	50.0	0.50	2.0	500	40	DO-41 SMA SMB
SB260	2.0	60	50.0	0.50	2.0	500	60	DO-41 SMA SMB
SB2100*	2.0	100	50.0	0.79	2.0	500	100	DO-201AD SMC
SB2200*	2.0	200	50.0	0.85	2.0	200	200	DO-201AD SMC
SB330*	3.0	30	80.0	0.50	3.0	500	30	DO-201AD SMA SMB SMC
SB340	3.0	40	80.0	0.50	3.0	500	40	DO-201AD SMA SMB SMC
SB360	3.0	60	80.0	0.70	3.0	500	60	DO-201AD SMA SMB SMC
SB3100	3.0	100	80.0	0.79	3.0	500	100	DO-201AD SMC
SB3200*	3.0	200	80.0	0.86	3.0	500	200	DO-201AD SMC
SB530*	5.0	30	150.0	0.55	5.0	500	30	DO-201AD TO-220-2 SMC
SB540	5.0	40	150.0	0.55	5.0	500	40	DO-201AD TO-220-2 SMC
SB560	5.0	60	150.0	0.67	5.0	500	60	DO-201AD TO-220-2 SMC
SB5100	5.0	100	150.0	0.80	5.0	500	100	DO-201AD TO-220-2 SMC
SB5200	5.0	200	150.0	0.87	5.0	500	200	DO-201AD TO-220-2 SMC


# DIODE

Part Number		Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°)				Package
		I <sub>O</sub>	V <sub>RM</sub> (V <sub>R</sub> )	I <sub>FSM</sub>	V <sub>FM</sub>		I <sub>RM</sub> (I <sub>R</sub> )		
					Rating	Conditions	Rating	Conditions	
					MAX. (V)	IF(A)	MAX. (μA)	V <sub>R</sub> (V)	
MBR1030C*	10.0	30	125.0	0.70	5.0	100	30	TO-220 TO-220F TO-262 TO-263	
MBR1045C	10.0	45	125.0	0.70	5.0	100	45	TO-220 TO-220F TO-262 TO-263	
MBR1060C	10.0	60	125.0	0.80	5.0	100	60	TO-220 TO-220F TO-262 TO-263	
MBR10100C	10.0	100	100.0	0.85	5.0	100	100	TO-220 TO-220F TO-262 TO-263	
MBR10200C	10.0	200	100.0	0.92	5.0	100	200	TO-220 TO-220F TO-262 TO-263	
MBR1530C*	15.0	30	150.0	0.84	15.0	100	30	TO-220 TO-220F TO-262 TO-263	
MBR1545C*	15.0	45	150.0	0.84	15.0	100	45	TO-220 TO-220F TO-262 TO-263	
MBR1560C*	15.0	60	150.0	0.90	15.0	100	60	TO-220 TO-220F TO-262 TO-263	
MBR2030C*	20.0	30	150.0	0.84	20.0	100	30	TO-220 TO-220F TO-262 TO-263	
MBR2045C	20.0	45	150.0	0.84	20.0	100	45	TO-220 TO-220F TO-262 TO-263	
MBR2060C	20.0	60	150.0	0.95	20.0	100	60	TO-220 TO-220F TO-262 TO-263	
MBR20100C	20.0	100	150.0	0.85	10.0	100	100	TO-220 TO-220F TO-262 TO-263	
MBR20200C	20.0	200	105.0	0.90	10.0	100	200	TO-220 TO-220F TO-262 TO-263	
MBR3030C*	30.0	30	200.0	0.76	30.0	1000	30	TO-220 TO-220F TO-262 TO-263 TO-3P	
MBR3045C*	30.0	45	200.0	0.76	30.0	1000	45	TO-220 TO-220F TO-262 TO-263 TO-3P	
MBR3060C*	30.0	60	200.0	0.80	30.0	5000	60	TO-220 TO-220F TO-262 TO-263 TO-3P	
MBR4030C*	40.0	30	400.0	0.70	20.0	1000	30	TO-220 TO-220F TO-262 TO-263 TO-3P	
MBR4045C	40.0	45	400.0	0.70	20.0	1000	45	TO-220 TO-220F TO-262 TO-263 TO-3P	
MBR4060C	40.0	60	400.0	0.80	20.0	1000	60	TO-220 TO-220F TO-262 TO-263 TO-3P	
MBR6030C*	60.0	30	500.0	0.62	30.0	1000	30	TO-3P TO-3PML	
MBR6045C*	60.0	45	500.0	0.62	30.0	1000	45	TO-3P TO-3PML	
SBL1630C*	16.0	30	250.0	0.55	8.0	500	30	TO-220 TO-220F TO-262 TO-263	
SBL1640C*	16.0	40	250.0	0.55	8.0	500	40	TO-220 TO-220F TO-262 TO-263	
SBL1660C*	16.0	60	250.0	0.70	8.0	500	60	TO-220 TO-220F TO-262 TO-263	
SBL2030C*	20.0	30	250.0	0.55	10.0	1000	30	TO-220 TO-220F TO-262 TO-263	
SBL2040C*	20.0	40	250.0	0.55	10.0	1000	40	TO-220 TO-220F TO-262 TO-263	
SBL2060C	20.0	60	250.0	0.75	10.0	1000	60	TO-220 TO-220F TO-262 TO-263	
SBL3030C*	30.0	30	250.0	0.55	15.0	1000	30	TO-220 TO-220F TO-262 TO-263	
SBL3040C	30.0	40	250.0	0.55	15.0	1000	40	TO-220 TO-220F TO-262 TO-263	
SBL3060C*	30.0	60	250.0	0.70	15.0	1000	60	TO-220 TO-220F TO-262 TO-263	


## MOS Gated Barrier Rectifier

Part Number 	Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°C)				Package
	I <sub>o</sub>	V <sub>RM</sub> (V <sub>R</sub> )	I <sub>FSM</sub>	V <sub>FM</sub>		I <sub>RM</sub> (I <sub>R</sub> )		
				Rating	Conditions	Rating	Conditions	
(A)	(V)	(A)	MAX. (V)	IF(A)	MAX. (μA)	V <sub>R</sub> (V)		
MGBR1U30*	1.0	30	75	0.41	1.0	500	30	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1S30*	1.0	30	50	0.46	1.0	500	30	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1V30*	1.0	30	40	0.51	1.0	500	30	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1L30*	1.0	30	30	0.56	1.0	200	30	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1U40*	1.0	40	75	0.45	1.0	500	40	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1S40*	1.0	40	50	0.49	1.0	500	40	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1V40*	1.0	40	40	0.53	1.0	500	40	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1L40*	1.0	40	30	0.57	1.0	200	40	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1U45*	1.0	45	75	0.46	1.0	500	45	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1S45*	1.0	45	50	0.50	1.0	500	45	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1V45*	1.0	45	40	0.54	1.0	500	45	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1L45*	1.0	45	30	0.58	1.0	200	45	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1U50*	1.0	50	75	0.49	1.0	500	50	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1S50*	1.0	50	50	0.53	1.0	500	50	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1V50*	1.0	50	40	0.57	1.0	500	50	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1L50*	1.0	50	30	0.61	1.0	200	50	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1U60*	1.0	60	75	0.52	1.0	500	60	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1S60*	1.0	60	50	0.56	1.0	500	60	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1V60*	1.0	60	40	0.60	1.0	500	60	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1L60*	1.0	60	30	0.64	1.0	200	60	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1U100*	1.0	100	75	0.66	1.0	500	100	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1S100*	1.0	100	50	0.71	1.0	500	100	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1V100*	1.0	100	40	0.76	1.0	500	100	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1L100*	1.0	100	30	0.81	1.0	200	100	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1U200*	1.0	200	75	0.77	1.0	500	200	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1S200*	1.0	200	50	0.82	1.0	500	200	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1V200*	1.0	200	40	0.87	1.0	500	200	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR1L200*	1.0	200	30	0.92	1.0	200	200	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2U30*	2.0	30	75	0.40	2.0	500	30	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2S30*	2.0	30	50	0.44	2.0	500	30	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2V30*	2.0	30	40	0.48	2.0	500	30	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2L30*	2.0	30	30	0.52	2.0	200	30	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2U40	2.0	40	75	0.42	2.0	500	40	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2S40*	2.0	40	50	0.46	2.0	500	40	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2V40*	2.0	40	40	0.50	2.0	500	40	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2L40*	2.0	40	30	0.54	2.0	200	40	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2U45*	2.0	45	75	0.46	2.0	500	45	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2S45*	2.0	45	50	0.50	2.0	500	45	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2V45*	2.0	45	40	0.54	2.0	500	45	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2L45*	2.0	45	30	0.58	2.0	200	45	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2U50*	2.0	50	75	0.49	2.0	500	50	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2S50*	2.0	50	50	0.53	2.0	500	50	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2V50*	2.0	50	40	0.57	2.0	500	50	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2L50*	2.0	50	30	0.61	2.0	200	50	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2U60*	2.0	60	75	0.52	2.0	500	60	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2S60*	2.0	60	50	0.56	2.0	500	60	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2V60*	2.0	60	40	0.60	2.0	500	60	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2L60*	2.0	60	30	0.64	2.0	200	60	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2U100*	2.0	100	75	0.66	2.0	500	100	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2S100*	2.0	100	50	0.71	2.0	500	100	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2V100*	2.0	100	40	0.76	2.0	500	100	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2L100*	2.0	100	30	0.81	2.0	200	100	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2U200*	2.0	200	75	0.77	2.0	500	200	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2S200*	2.0	200	50	0.82	2.0	500	200	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2V200*	2.0	200	40	0.87	2.0	500	200	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR2L200*	2.0	200	30	0.92	2.0	200	200	DFN3*3 DO-201AD1 SMC SMB SMA

# DIODE


 Part Number	Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°C)				Package
	I <sub>O</sub>	V <sub>RM</sub> (V <sub>R</sub> )	I <sub>FSM</sub>	V <sub>FM</sub>		I <sub>RM</sub> (I <sub>R</sub> )		
				Rating	Conditions	Rating	Conditions	
	(A)	(V)	(A)	MAX. (V)	IF(A)	MAX. (μA)	V <sub>R</sub> (V)	
MGBR3U30*	3.0	30	75	0.40	3.0	500	30	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3S30*	3.0	30	50	0.44	3.0	500	30	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3V30*	3.0	30	40	0.48	3.0	500	30	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3L30*	3.0	30	30	0.52	3.0	200	30	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3U40*	3.0	40	75	0.42	3.0	500	40	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3S40*	3.0	40	50	0.46	3.0	500	40	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3V40*	3.0	40	40	0.50	3.0	500	40	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3L40*	3.0	40	30	0.54	3.0	200	40	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3U45*	3.0	45	75	0.46	3.0	500	45	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3S45*	3.0	45	50	0.50	3.0	500	45	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3V45*	3.0	45	40	0.54	3.0	500	45	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3L45*	3.0	45	30	0.58	3.0	200	45	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3U50*	3.0	50	75	0.49	3.0	500	50	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3S50*	3.0	50	50	0.53	3.0	500	50	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3V50*	3.0	50	40	0.57	3.0	500	50	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3L50*	3.0	50	30	0.61	3.0	200	50	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3U60*	3.0	60	75	0.52	3.0	500	60	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3S60*	3.0	60	50	0.56	3.0	500	60	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3V60*	3.0	60	40	0.60	3.0	500	60	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3L60*	3.0	60	30	0.64	3.0	200	60	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3U100*	3.0	100	75	0.66	3.0	500	100	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3S100*	3.0	100	50	0.71	3.0	500	100	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3V100*	3.0	100	40	0.76	3.0	500	100	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3L100*	3.0	100	30	0.81	3.0	200	100	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3U200*	3.0	200	75	0.77	3.0	500	200	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3S200*	3.0	200	50	0.82	3.0	500	200	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3V200*	3.0	200	40	0.87	3.0	500	200	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR3L200*	3.0	200	30	0.92	3.0	200	200	DFN3*3 DO-201AD1 SMC SMB SMA
MGBR5U30*	5.0	30	200	0.36	5.0	1000	30	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5S30*	5.0	30	180	0.41	5.0	1000	30	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5V30*	5.0	30	150	0.46	5.0	1000	30	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5L30*	5.0	30	120	0.51	5.0	500	30	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5U40	5.0	40	200	0.39	5.0	500	40	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5S40	5.0	40	180	0.44	5.0	500	40	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5V40*	5.0	40	150	0.49	5.0	500	40	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5L40*	5.0	40	120	0.54	5.0	300	40	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5U45	5.0	45	200	0.40	5.0	500	45	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5S45	5.0	45	180	0.45	5.0	500	45	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5V45	5.0	45	150	0.50	5.0	500	45	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5L45*	5.0	45	120	0.55	5.0	300	45	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5U50*	5.0	50	200	0.41	5.0	500	50	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5S50*	5.0	50	180	0.46	5.0	500	50	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5V50*	5.0	50	150	0.51	5.0	500	50	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5L50*	5.0	50	120	0.56	5.0	300	50	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5U60*	5.0	60	200	0.53	5.0	500	60	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5S60*	5.0	60	180	0.58	5.0	500	60	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5V60*	5.0	60	150	0.63	5.0	500	60	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5L60*	5.0	60	120	0.68	5.0	300	60	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5U100*	5.0	100	200	0.64	5.0	200	100	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5S100*	5.0	100	180	0.70	5.0	200	100	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5V100*	5.0	100	150	0.76	5.0	200	100	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5L100	5.0	100	150	0.80	5.0	250	100	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC TO-252
MGBR5U200*	5.0	200	200	0.73	5.0	100	200	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5S200*	5.0	200	180	0.79	5.0	100	200	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5V200*	5.0	200	150	0.85	5.0	100	200	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC
MGBR5L200*	5.0	200	120	0.91	5.0	50	200	DFN5*6 TO-277 Z3PAK DO-201AD1 SMC

# DIODE


Part Number 	Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°C)				Package
	I <sub>o</sub>	V <sub>RM</sub> (V <sub>R</sub> )	I <sub>FSM</sub>	V <sub>FM</sub>		I <sub>RM</sub> (I <sub>r</sub> )		
				Rating	Conditions	Rating	Conditions	
				(A)	(V)	(A)	(V)	
MGBR8U30*	8.0	30	250	0.37	8.0	1000	30	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8S30*	8.0	30	225	0.42	8.0	1000	30	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8V30*	8.0	30	180	0.47	8.0	1000	30	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8L30*	8.0	30	150	0.52	8.0	500	30	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8U40*	8.0	40	250	0.40	8.0	500	40	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8S40*	8.0	40	220	0.45	8.0	500	40	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8V40*	8.0	40	180	0.50	8.0	500	40	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8L40*	8.0	40	150	0.55	8.0	300	40	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8U45*	8.0	45	250	0.41	8.0	500	45	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8S45*	8.0	45	225	0.46	8.0	500	45	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8V45*	8.0	45	180	0.51	8.0	500	45	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8L45*	8.0	45	150	0.56	8.0	300	45	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8U50*	8.0	50	250	0.42	8.0	500	50	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8S50*	8.0	50	220	0.47	8.0	500	50	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8V50*	8.0	50	180	0.52	8.0	500	50	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8L50*	8.0	50	150	0.57	8.0	300	50	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8U60*	8.0	60	250	0.43	8.0	500	60	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8S60*	8.0	60	220	0.48	8.0	500	60	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8V60*	8.0	60	180	0.53	8.0	500	60	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8L60*	8.0	60	150	0.55	8.0	300	60	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8U100*	8.0	100	250	0.60	8.0	200	100	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8S100*	8.0	100	220	0.66	8.0	200	100	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8V100*	8.0	100	180	0.72	8.0	200	100	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8L100*	8.0	100	150	0.78	8.0	100	100	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8U200*	8.0	200	250	0.73	8.0	100	200	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8S200*	8.0	200	220	0.79	8.0	100	200	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8V200*	8.0	200	180	0.85	8.0	100	200	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR8L200*	8.0	200	150	0.91	8.0	50	200	SMC-T1 DFN5*6 TO-277 Z3PAK DO-201AD1
MGBR10U30*	10.0	30	250	0.38	10.0	1000	30	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10S30	10.0	30	175	0.43	10.0	500	30	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10V30*	10.0	30	180	0.48	10.0	1000	30	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10L30	10.0	30	150	0.53	10.0	500	30	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10U40*	10.0	40	250	0.42	10.0	500	40	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10S40	10.0	40	175	0.47	10.0	500	40	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10V40*	10.0	40	180	0.52	10.0	500	40	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10L40	10.0	40	150	0.57	10.0	300	40	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10U45	10.0	45	100	0.43	10.0	500	45	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10S45	10.0	45	100	0.48	10.0	500	45	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10V45	10.0	45	90	0.53	10.0	500	45	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10L45	10.0	45	90	0.58	10.0	300	45	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10U50	10.0	50	180	0.45	10.0	500	50	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10S50	10.0	50	180	0.50	10.0	500	50	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10V50	10.0	50	150	0.55	10.0	500	50	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10L50	10.0	50	150	0.60	10.0	300	50	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10U60*	10.0	60	250	0.49	10.0	500	60	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10S60	10.0	60	175	0.54	10.0	500	60	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10V60*	10.0	60	180	0.59	10.0	500	60	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10L60	10.0	60	150	0.64	10.0	300	60	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10U100*	10.0	100	250	0.60	10.0	200	100	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10S100*	10.0	100	220	0.66	10.0	200	100	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10V100*	10.0	100	180	0.72	10.0	200	100	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10L100*	10.0	100	150	0.78	10.0	100	100	TO-252 SMC-T1 DFN5*6 TO-277 Z3PAK
MGBR10U200*	10.0	200	250	0.72	10.0	100	200	TO-252 SMC-T1 TO-277 Z3PAK
MGBR10S200*	10.0	200	220	0.78	10.0	100	200	TO-252 SMC-T1 TO-277 Z3PAK
MGBR10V200*	10.0	200	180	0.84	10.0	100	200	TO-252 SMC-T1 TO-277 Z3PAK
MGBR10L200*	10.0	200	150	0.90	10.0	50	200	TO-252 SMC-T1 TO-277 Z3PAK
MGBR10U300	10.0	300	160	0.85	10.0	100	200	TO-252 SMC-T1 TO-277 Z3PAK
MGBR20L300	20.0	300	235	0.92	10.0	100	200	TO-252 SMC-T1 TO-277 Z3PAK




# DIODE


 Part Number	Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°C)				Package
	I <sub>O</sub>	V <sub>RM</sub> (V <sub>R</sub> )	I <sub>FSM</sub>	V <sub>FM</sub>		I <sub>RM</sub> (I <sub>R</sub> )		
				Rating	Conditions	Rating	Conditions	
	(A)	(V)	(A)	MAX. (V)	IF(A)	MAX. (μA)	V <sub>R</sub> (V)	
MGBR12L30	12.0	30	200	0.54	12.0	500	30	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR12L40	12.0	40	180	0.52	12.0	300	40	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR12L45	12.0	45	180	0.60	12.0	300	45	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15U30*	15.0	30	300	0.39	15.0	1000	30	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15S30*	15.0	30	250	0.44	15.0	1000	30	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15V30	15.0	30	200	0.49	15.0	500	30	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15L30	15.0	30	180	0.54	15.0	500	30	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15U40*	15.0	40	300	0.43	15.0	500	40	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15S40*	15.0	40	250	0.48	15.0	500	40	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15V40	15.0	40	200	0.53	15.0	500	40	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15L40	15.0	40	180	0.58	15.0	300	40	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15U45*	15.0	45	300	0.45	15.0	500	45	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15S45*	15.0	45	250	0.50	15.0	500	45	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15V45	15.0	45	180	0.55	15.0	500	45	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15L45	15.0	45	180	0.60	15.0	300	45	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15U50*	15.0	50	300	0.46	15.0	500	50	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15S50	15.0	50	200	0.50	15.0	500	50	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15V50*	15.0	50	200	0.56	15.0	500	50	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15L50	15.0	50	180	0.61	15.0	300	50	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15U60*	15.0	60	300	0.50	15.0	500	60	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15S60*	15.0	60	250	0.55	15.0	500	60	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15V60	15.0	60	200	0.60	15.0	500	60	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15L60	15.0	60	180	0.65	15.0	300	60	TO-220-2 TO-252 SMC-T1 DFN5*6 TO-277
MGBR15U100*	15.0	100	300	0.60	15.0	200	100	TO-220-2 TO-252 SMC-T1 TO-277
MGBR15S100*	15.0	100	250	0.66	15.0	200	100	TO-220-2 TO-252 SMC-T1 TO-277
MGBR15V100*	15.0	100	200	0.72	15.0	200	100	TO-220-2 TO-252 SMC-T1 TO-277
MGBR15L100*	15.0	100	180	0.78	15.0	100	100	TO-220-2 TO-252 SMC-T1 TO-277
MGBR15U200*	15.0	200	300	0.72	15.0	100	200	TO-220-2 TO-252 SMC-T1 TO-277
MGBR15S200*	15.0	200	250	0.78	15.0	100	200	TO-220-2 TO-252 SMC-T1 TO-277
MGBR15V200*	15.0	200	200	0.84	15.0	100	200	TO-220-2 TO-252 SMC-T1 TO-277
MGBR15L200*	15.0	200	180	0.90	15.0	50	200	TO-220-2 TO-252 SMC-T1 TO-277
MGBR20U30*	20.0	30	300	0.40	20.0	1000	30	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20S30*	20.0	30	300	0.45	20.0	1000	30	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20V30*	20.0	30	250	0.50	20.0	1000	30	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20L30*	20.0	30	250	0.55	20.0	500	30	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20U40	20.0	40	300	0.44	20.0	500	40	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20S40	20.0	40	300	0.49	20.0	500	40	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20V40	20.0	40	250	0.54	20.0	500	40	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20L40	20.0	40	250	0.59	20.0	300	40	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20U45*	20.0	45	300	0.45	20.0	500	45	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20S45*	20.0	45	300	0.50	20.0	500	45	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20V45*	20.0	45	250	0.55	20.0	500	45	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20L45*	20.0	45	250	0.60	20.0	300	45	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20U50	20.0	50	300	0.48	20.0	500	50	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20S50	20.0	50	300	0.53	20.0	500	50	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20V50	20.0	50	250	0.58	20.0	500	50	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20L50	20.0	50	250	0.63	20.0	300	50	TO-220-2 TO-252 SMC-T1 DFN5*6

# DIODE

Part Number 	Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°C)				Package
	I <sub>O</sub>	V <sub>RM</sub> (V <sub>R</sub> )	I <sub>FSM</sub>	V <sub>FM</sub>		I <sub>RM</sub> (I <sub>R</sub> )		
				Rating	Conditions	Rating	Conditions	
(A)	(V)	(A)	MAX. (V)	IF(A)	MAX. (μA)	V <sub>R</sub> (V)		
MGBR20U60*	20.0	60	300	0.50	20.0	500	60	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20S60*	20.0	60	300	0.55	20.0	500	60	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20V60	20.0	60	250	0.60	20.0	500	60	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20L60	20.0	60	250	0.65	20.0	300	60	TO-220-2 TO-252 SMC-T1 DFN5*6
MGBR20V80	20.0	80	180	0.80	20.0	500	80	TO-220 TO-220F
MGBR20U100*	20.0	100	300	0.63	20.0	300	100	TO-220-2 TO-252 SMC-T1
MGBR20S100*	20.0	100	300	0.69	20.0	300	100	TO-220-2 TO-252 SMC-T1
MGBR20V100*	20.0	100	250	0.75	20.0	300	100	TO-220-2 TO-252 SMC-T1
MGBR20L100	20.0	100	250	0.80	20.0	300	100	TO-220-2 TO-252 SMC-T1
MGBR20U200*	20.0	200	300	0.70	20.0	100	200	TO-220-2 TO-252 SMC-T1
MGBR20S200*	20.0	200	300	0.76	20.0	100	200	TO-220-2 TO-252 SMC-T1
MGBR20V200*	20.0	200	250	0.82	20.0	100	200	TO-220-2 TO-252 SMC-T1
MGBR20L200*	20.0	200	250	0.88	20.0	50	200	TO-220-2 TO-252 SMC-T1
MGBR20L200*	20.0	200	250	0.88	20.0	50	200	TO-220-2 TO-252 SMC-T1
MGBR20L300	20.0	300	235	0.92	20.0	100	300	TO-220
MGBR30L80	30.0	80	200	0.95	30.0	500	80	TO-220 TO-220F

Part Number 	Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°C)				Package
	I <sub>O</sub>	V <sub>RM</sub> (V <sub>R</sub> )	I <sub>FSM</sub>	V <sub>FM</sub>		I <sub>RM</sub> (I <sub>R</sub> )		
				Rating	Conditions	Rating	Conditions	
(A)	(V)	(A)	MAX. (V)	IF(A)	MAX. (μA)	V <sub>R</sub> (V)		
MGBR10U30C*	10.0	30	200	0.36	5.0	1000	30	TO-262 TO-220 TO-220F TO-252
MGBR10S30C*	10.0	30	180	0.41	5.0	1000	30	TO-262 TO-220 TO-220F TO-252
MGBR10V30C*	10.0	30	150	0.46	5.0	1000	30	TO-262 TO-220 TO-220F TO-252
MGBR10L30C*	10.0	30	120	0.51	5.0	500	30	TO-262 TO-220 TO-220F TO-252
MGBR10U40C*	10.0	40	200	0.39	5.0	500	40	TO-262 TO-220 TO-220F TO-252
MGBR10S40C*	10.0	40	180	0.44	5.0	500	40	TO-262 TO-220 TO-220F TO-252
MGBR10V40C*	10.0	40	150	0.49	5.0	500	40	TO-262 TO-220 TO-220F TO-252
MGBR10L40C*	10.0	40	120	0.54	5.0	300	40	TO-262 TO-220 TO-220F TO-252
MGBR10U45C	10.0	45	100	0.40	5.0	500	45	TO-262 TO-220 TO-220F TO-252
MGBR10S45C	10.0	45	100	0.45	5.0	500	45	TO-262 TO-220 TO-220F TO-252
MGBR10V45C	10.0	45	90	0.50	5.0	500	45	TO-262 TO-220 TO-220F TO-252
MGBR10L45C	10.0	45	90	0.55	5.0	300	45	TO-262 TO-220 TO-220F TO-252
MGBR10U50C	10.0	50	180	0.41	5.0	500	50	TO-262 TO-220 TO-220F TO-252
MGBR10S50C	10.0	50	150	0.46	5.0	500	50	TO-262 TO-220 TO-220F TO-252
MGBR10V50C	10.0	50	120	0.51	5.0	500	50	TO-262 TO-220 TO-220F TO-252
MGBR10L50C	10.0	50	90	0.56	5.0	300	50	TO-262 TO-220 TO-220F TO-252
MGBR10U60C	10.0	60	180	0.48	5.0	500	60	TO-262 TO-220 TO-220F TO-252
MGBR10S60C	10.0	60	150	0.53	5.0	500	60	TO-262 TO-220 TO-220F TO-252
MGBR10V60C	10.0	60	120	0.58	5.0	500	60	TO-262 TO-220 TO-220F TO-252
MGBR10L60C	10.0	60	120	0.63	5.0	300	60	TO-262 TO-220 TO-220F TO-252
MGBR10U100C	10.0	100	200	0.62	5.0	200	100	TO-262 TO-220 TO-220F TO-252
MGBR10S100C	10.0	100	180	0.67	5.0	200	100	TO-262 TO-220 TO-220F TO-252
MGBR10V100C	10.0	100	120	0.75	5.0	200	100	TO-262 TO-220 TO-220F TO-252
MGBR10L100C	10.0	100	80	0.75	5.0	100	100	TO-262 TO-220 TO-220F TO-252
MGBR10L150C	10.0	100	100	0.75	5.0	100	100	TO-262 TO-220 TO-220F TO-252
MGBR10U200C*	10.0	200	200	0.73	5.0	100	200	TO-262 TO-220 TO-220F TO-252
MGBR10S200C*	10.0	200	180	0.79	5.0	100	200	TO-262 TO-220 TO-220F TO-252
MGBR10V200C*	10.0	200	150	0.85	5.0	100	200	TO-262 TO-220 TO-220F TO-252
MGBR10L200C*	10.0	200	120	0.91	5.0	50	200	TO-262 TO-220 TO-220F TO-252
MGBR20U30C*	20.0	30	250	0.38	10.0	1000	30	TO-262 TO-220 TO-220F TO-252
MGBR20S30C*	20.0	30	220	0.43	10.0	1000	30	TO-262 TO-220 TO-220F TO-252
MGBR20V30C*	20.0	30	150	0.48	10.0	1000	30	TO-262 TO-220 TO-220F TO-252
MGBR20L30C	20.0	30	170	0.55	10.0	200	30	TO-262 TO-220 TO-220F TO-252
MGBR20U40C*	20.0	40	250	0.42	10.0	500	40	TO-262 TO-220 TO-220F TO-252
MGBR20S40C*	20.0	40	220	0.47	10.0	500	40	TO-262 TO-220 TO-220F TO-252
MGBR20V40C*	20.0	40	180	0.52	10.0	500	40	TO-262 TO-220 TO-220F TO-252
MGBR20L40C*	20.0	40	150	0.57	10.0	300	40	TO-262 TO-220 TO-220F TO-252
MGBR20U45C	20.0	45	250	0.43	10.0	500	45	TO-262 TO-220 TO-220F TO-252
MGBR20S45C	20.0	45	180	0.48	10.0	500	45	TO-262 TO-220 TO-220F TO-252
MGBR20V45C	20.0	45	150	0.54	10.0	500	45	TO-262 TO-220 TO-220F TO-252
MGBR20L45C	20.0	45	120	0.58	10.0	300	45	TO-262 TO-220 TO-220F TO-252
MGBR20U50C	20.0	50	250	0.45	10.0	500	50	TO-262 TO-220 TO-220F TO-252
MGBR20S50C	20.0	50	180	0.50	10.0	500	50	TO-262 TO-220 TO-220F TO-252
MGBR20V50C	20.0	50	150	0.55	10.0	500	50	TO-262 TO-220 TO-220F TO-252
MGBR20L50C	20.0	50	150	0.60	10.0	300	50	TO-262 TO-220 TO-220F TO-252
MGBR20U60C	20.0	60	250	0.49	10.0	500	60	TO-262 TO-220 TO-220F TO-252
MGBR20S60C	20.0	60	220	0.54	10.0	500	60	TO-262 TO-220 TO-220F TO-252
MGBR20V60C	20.0	60	180	0.59	10.0	500	60	TO-262 TO-220 TO-220F TO-252
MGBR20L60C	20.0	60	150	0.59	10.0	300	60	TO-262 TO-220 TO-220F TO-252
MGBR20V80C	20.0	80	150	0.78	10.0	250	80	TO-220


# DIODE

 Part Number	Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°C)				Package
	I <sub>O</sub>	V <sub>RM</sub> (V <sub>R</sub> )	I <sub>FSM</sub>	V <sub>FM</sub>		I <sub>RM</sub> (I <sub>R</sub> )		
				Rating	Conditions	Rating	Conditions	
				MAX. (V)	IF(A)	MAX. (μA)	V <sub>R</sub> (V)	
MGBR20U100C	20.0	100	250	0.65	10.0	200	100	TO-262 TO-220 TO-220F TO-252
MGBR20S100C	20.0	100	200	0.70	10.0	200	100	TO-262 TO-220 TO-220F TO-252
MGBR20V100C	20.0	100	180	0.75	10.0	100	100	TO-262 TO-220 TO-220F TO-252
MGBR20L100C	20.0	100	150	0.80	10.0	100	100	TO-262 TO-220 TO-220F TO-252
MGBR20U150C	20.0	150	250	0.75	10.0	100	150	TO-262 TO-220 TO-220F TO-252
MGBR20S150C	20.0	150	180	0.80	10.0	100	150	TO-262 TO-220 TO-220F TO-252
MGBR20V150C	20.0	150	200	0.85	10.0	300	150	TO-262 TO-220 TO-220F TO-252
MGBR20L150C	20.0	150	150	0.90	10.0	50	150	TO-262 TO-220 TO-220F TO-252
MGBR20U200C*	20.0	200	250	0.72	10.0	100	200	TO-262 TO-220 TO-220F TO-252
MGBR20S200C*	20.0	200	220	0.78	10.0	100	200	TO-262 TO-220 TO-220F TO-252
MGBR20V200C*	20.0	200	180	0.84	10.0	100	200	TO-262 TO-220 TO-220F TO-252
MGBR20L200C	20.0	200	180	0.86	10.0	100	200	TO-262 TO-220 TO-220F TO-252
MGBR20L300C	20.0	300	180	0.92	10.0	100	300	TO-262 TO-220 TO-220F TO-252
MGBR30U30C*	30.0	30	300	0.39	15.0	1500	30	TO-3P TO-262 TO-220 TO-220F
MGBR30S30C*	30.0	30	300	0.39	15.0	1500	30	TO-3P TO-262 TO-220 TO-220F
MGBR30S30C*	30.0	30	280	0.44	15.0	1500	30	TO-3P TO-262 TO-220 TO-220F
MGBR30V30C*	30.0	30	250	0.49	15.0	1500	30	TO-3P TO-262 TO-220 TO-220F
MGBR30L30C*	30.0	30	200	0.54	15.0	1000	30	TO-3P TO-262 TO-220 TO-220F
MGBR30U40C*	30.0	40	300	0.43	15.0	500	40	TO-3P TO-262 TO-220 TO-220F
MGBR30S40C*	30.0	40	280	0.48	15.0	500	40	TO-3P TO-262 TO-220 TO-220F
MGBR30V40C*	30.0	40	250	0.53	15.0	500	40	TO-3P TO-262 TO-220 TO-220F
MGBR30L40C*	30.0	40	200	0.58	15.0	300	40	TO-3P TO-262 TO-220 TO-220F
MGBR30U45C	30.0	45	280	0.45	15.0	500	45	TO-3P TO-262 TO-220 TO-220F
MGBR30S45C	30.0	45	250	0.50	15.0	500	45	TO-3P TO-262 TO-220 TO-220F
MGBR30V45C	30.0	45	200	0.55	15.0	500	45	TO-3P TO-262 TO-220 TO-220F
MGBR30L45C	30.0	45	200	0.60	15.0	300	45	TO-3P TO-262 TO-220 TO-220F
MGBR30U50C	30.0	50	280	0.46	15.0	500	50	TO-3P TO-262 TO-220 TO-220F
MGBR30S50C	30.0	50	250	0.50	15.0	500	50	TO-3P TO-262 TO-220 TO-220F
MGBR30V50C	30.0	50	250	0.55	15.0	500	50	TO-3P TO-262 TO-220 TO-220F
MGBR30L50C	30.0	50	200	0.55	15.0	300	50	TO-3P TO-262 TO-220 TO-220F
MGBR30U60C	30.0	60	300	0.50	15.0	500	60	TO-3P TO-262 TO-220 TO-220F
MGBR30S60C	30.0	60	280	0.55	15.0	500	60	TO-3P TO-262 TO-220 TO-220F
MGBR30V60C	30.0	60	250	0.60	15.0	500	60	TO-3P TO-262 TO-220 TO-220F
MGBR30L60C	30.0	60	200	0.65	15.0	300	60	TO-3P TO-262 TO-220 TO-220F
MGBR30U100C*	30.0	100	300	0.60	15.0	200	100	TO-3P TO-262 TO-220 TO-220F
MGBR30S100C*	30.0	100	280	0.66	15.0	200	100	TO-3P TO-262 TO-220 TO-220F
MGBR30V100C	30.0	100	160	0.75	15.0	200	100	TO-3P TO-262 TO-220 TO-220F
MGBR30L100C	30.0	100	200	0.78	15.0	200	100	TO-3P TO-262 TO-220 TO-220F
MGBR30V150C	30.0	150	200	0.85	15.0	100	150	TO-3P TO-262 TO-220 TO-220F1
MGBR30L150C	30.0	150	200	0.90	15.0	100	150	TO-3P TO-262 TO-220 TO-220F1
MGBR30U200C*	30.0	200	300	0.72	15.0	100	200	TO-3P TO-262 TO-220 TO-220F
MGBR30S200C*	30.0	200	280	0.78	15.0	100	200	TO-3P TO-262 TO-220 TO-220F
MGBR30V200C*	30.0	200	250	0.84	15.0	100	200	TO-3P TO-262 TO-220 TO-220F
MGBR30L200C*	30.0	200	200	0.90	15.0	50	200	TO-3P TO-262 TO-220 TO-220F
MGBR30V300C	30.0	300	200	0.90	15.0	100	300	TO-3P TO-262 TO-220 TO-220F
MGBR40U30C*	40.0	30	400	0.40	20.0	1000	30	TO-3P TO-262 TO-220 TO-220F
MGBR40S30C*	40.0	30	360	0.45	20.0	1000	30	TO-3P TO-262 TO-220 TO-220F
MGBR40V30C*	40.0	30	320	0.50	20.0	1000	30	TO-3P TO-262 TO-220 TO-220F
MGBR40L30C*	40.0	30	280	0.55	20.0	500	30	TO-3P TO-262 TO-220 TO-220F
MGBR40U40C*	40.0	40	400	0.44	20.0	500	40	TO-3P TO-262 TO-220 TO-220F
MGBR40S40C*	40.0	40	360	0.49	20.0	500	40	TO-3P TO-262 TO-220 TO-220F
MGBR40V40C*	40.0	40	320	0.54	20.0	500	40	TO-3P TO-262 TO-220 TO-220F
MGBR40L40C*	40.0	40	280	0.59	20.0	300	40	TO-3P TO-262 TO-220 TO-220F
MGBR40U45C	40.0	45	360	0.45	20.0	500	45	TO-3P TO-262 TO-220 TO-220F
MGBR40S45C	40.0	45	350	0.50	20.0	500	45	TO-3P TO-262 TO-220 TO-220F
MGBR40V45C	40.0	45	280	0.55	20.0	500	45	TO-3P TO-262 TO-220 TO-220F
MGBR40L45C	40.0	45	250	0.60	20.0	300	45	TO-3P TO-262 TO-220 TO-220F
MGBR40U50C*	40.0	50	400	0.48	20.0	500	50	TO-3P TO-262 TO-220 TO-220F
MGBR40S50C*	40.0	50	360	0.53	20.0	500	50	TO-3P TO-262 TO-220 TO-220F
MGBR40V50C*	40.0	50	320	0.58	20.0	500	50	TO-3P TO-262 TO-220 TO-220F
MGBR40L50C*	40.0	50	280	0.63	20.0	300	50	TO-3P TO-262 TO-220 TO-220F
MGBR40U60C	40.0	60	400	0.50	20.0	500	60	TO-3P TO-262 TO-220 TO-220F
MGBR40S60C	40.0	60	360	0.55	20.0	500	60	TO-3P TO-262 TO-220 TO-220F
MGBR40V60C	40.0	60	280	0.60	20.0	500	60	TO-3P TO-262 TO-220 TO-220F
MGBR40L60C	40.0	60	280	0.65	20.0	300	60	TO-3P TO-262 TO-220 TO-220F
MGBR40U100C	40.0	100	360	0.65	20.0	200	100	TO-3P TO-262 TO-220 TO-220F
MGBR40S100C	40.0	100	350	0.70	20.0	200	100	TO-3P TO-262 TO-220 TO-220F
MGBR40V100C	40.0	100	300	0.75	20.0	200	100	TO-3P TO-262 TO-220 TO-220F
MGBR40V150C	40.0	150	250	0.90	20.0	100	150	TO-3P TO-262 TO-220 TO-220F
MGBR40U200C*	40.0	200	400	0.70	20.0	100	200	TO-3P TO-262 TO-220 TO-220F
MGBR40S200C*	40.0	200	360	0.76	20.0	100	200	TO-3P TO-262 TO-220 TO-220F
MGBR40V200C*	40.0	200	320	0.82	20.0	100	200	TO-3P TO-262 TO-220 TO-220F
MGBR40L200C*	40.0	200	280	0.88	20.0	50	200	TO-3P TO-262 TO-220 TO-220F
MGBR60U30C*	60.0	30	400	0.38	30.0	1000	30	TO-3PML TO-3P TO-220
MGBR60S30C*	60.0	30	360	0.43	30.0	1000	30	TO-3PML TO-3P TO-220
MGBR60V30C*	60.0	30	320	0.48	30.0	1000	30	TO-3PML TO-3P TO-220
MGBR60L30C*	60.0	30	280	0.53	30.0	500	30	TO-3PML TO-3P TO-220

# DIODE

Part Number 	Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°C)				Package
	I <sub>o</sub>	V <sub>RM</sub> (V <sub>R</sub> )	I <sub>FSM</sub>	V <sub>FM</sub>		I <sub>RM</sub> (I <sub>R</sub> )		
				Rating	Conditions	Rating	Conditions	
(A)	(V)	(A)	MAX. (V)	IF(A)	MAX. (μA)	V <sub>R</sub> (V)		
MGBR60U40C*	60.0	40	400	0.39	30.0	500	40	TO-3PML TO-3P TO-220
MGBR60S40C*	60.0	40	360	0.44	30.0	500	40	TO-3PML TO-3P TO-220
MGBR60V40C*	60.0	40	320	0.49	30.0	500	40	TO-3PML TO-3P TO-220
MGBR60L40C*	60.0	40	280	0.54	30.0	300	40	TO-3PML TO-3P TO-220
MGBR60U45C*	60.0	45	400	0.40	30.0	500	45	TO-3PML TO-3P TO-220
MGBR60S45C*	60.0	45	360	0.45	30.0	500	45	TO-3PML TO-3P TO-220
MGBR60V45C*	60.0	45	320	0.50	30.0	500	45	TO-3PML TO-3P TO-220
MGBR60L45C*	60.0	45	280	0.55	30.0	300	45	TO-3PML TO-3P TO-220
MGBR60U50C*	60.0	50	400	0.45	30.0	500	50	TO-3PML TO-3P TO-220
MGBR60S50C*	60.0	50	360	0.50	30.0	500	50	TO-3PML TO-3P TO-220
MGBR60V50C*	60.0	50	320	0.55	30.0	500	50	TO-3PML TO-3P TO-220
MGBR60L50C*	60.0	50	280	0.60	30.0	300	50	TO-3PML TO-3P TO-220
MGBR60U60C*	60.0	60	400	0.48	30.0	500	60	TO-3PML TO-3P TO-220
MGBR60S60C*	60.0	60	360	0.53	30.0	500	60	TO-3PML TO-3P TO-220
MGBR60V60C*	60.0	60	320	0.58	30.0	500	60	TO-3PML TO-3P TO-220
MGBR60L60C*	60.0	60	280	0.63	30.0	300	60	TO-3PML TO-3P TO-220
MGBR60U100C*	60.0	100	400	0.61	30.0	200	100	TO-3PML TO-3P TO-220
MGBR60S100C*	60.0	100	360	0.67	30.0	200	100	TO-3PML TO-3P TO-220
MGBR60V100C*	60.0	100	320	0.73	30.0	200	100	TO-3PML TO-3P TO-220
MGBR60L100C*	60.0	100	280	0.79	30.0	200	100	TO-3PML TO-3P TO-220
MGBR60U200C*	60.0	200	400	0.69	30.0	100	200	TO-3PML TO-3P TO-220
MGBR60S200C*	60.0	200	360	0.75	30.0	100	200	TO-3PML TO-3P TO-220
MGBR60V200C*	60.0	200	320	0.81	30.0	100	200	TO-3PML TO-3P TO-220
MGBR60L200C*	60.0	200	280	0.87	30.0	50	200	TO-3PML TO-3P TO-220

## Ultrafast Rectifier Diode

Part Number 	Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°C)						Package
	I <sub>o</sub> (A)	V <sub>RM</sub> (V <sub>R</sub> ) (V)	I <sub>FSM</sub> /Per Diode (A)	V <sub>FM</sub> /Per Diode		I <sub>RM</sub> (I <sub>R</sub> )		t <sub>rr</sub> (ns)		
				Rating	Conditions	Rating	Conditions	Rating	Conditions	
				MAX. (V)	IF(A)	MAX. (μA)	V <sub>R</sub> (V)	MAX. (nS)	IF (A)	
UMUR820	8	200	100	0.975	8	5	200	35	1.0	TO-220-2 TO-220F-2 TO-263
UMUR840*	8	400	100	1.00	8	5	400	35	1.0	TO-220-2 TO-220F-2 TO-263
UMUR860*	8	600	100	1.50	8	5	600	35	1.0	TO-220-2 TO-220F-2 TO-263
UMUR8120*	8	1200	100	2.60	8	5	1200	55	1.0	TO-220-2 TO-220F-2 TO-263
UMUR1520*	15	200	200	1.05	8	10	200	35	1.0	TO-220-2 TO-220F-2 TO-263
UMUR1560	15	600	150	1.50	8	10	600	60	1.0	TO-220-2 TO-220F-2 TO-263
UMUR15120*	15	1200	150	2.60	8	10	1200	70	1.0	TO-220-2 TO-220F-2 TO-263
UMUR2020	20	200	250	1.10	20	50	200	95	1.0	TO-220-2 TO-220F-2 TO-263
UMUR2060	20	600	150	1.50	20	10	600	50	1.0	TO-220-2 TO-220F-2 TO-263
UMUR20120*	20	1200	150	2.60	20	10	1200	60	1.0	TO-220-2 TO-220F-2 TO-263
UMUR2520	25	200	500	0.95	25	10	200	50	1.0	TO-220-2 TO-220F-2 TO-263
UMUR2560*	25	600	500	1.25	25	10	600	75	1.0	TO-220-2 TO-220F-2
UMUR25120*	25	1200	500	2.60	25	10	1200	85	1.0	TO-220-2 TO-220F-2
UFRP860*	8	600	100	2.10	8	100	600	30	1.0	TO-220-2 TO-220F-2 TO-263
UFRP8120*	8	1200	100	3.20	8	100	1200	55	1.0	TO-220-2 TO-220F-2 TO-263
UFRP1560*	15	600	200	2.10	15	100	600	35	1.0	TO-220-2 TO-220F-2 TO-263
UFRP15120*	15	1200	200	3.20	15	100	1200	65	1.0	TO-220-2 TO-220F-2 TO-263
UFRP3060*	30	600	325	2.10	30	250	600	40	1.0	TO-220-2 TO-220F-2 TO-263
UFRP30120*	30	1200	325	3.20	30	250	1200	65	1.0	TO-220-2 TO-220F-2 TO-263
BYC5-500*	5	500	44	2.90	5	100	500	50	1.0	TO-220-2 TO-220F-2 TO-263
BYC5-600	5	600	44	2.90	5	100	600	50	1.0	TO-220-2 TO-220F-2 TO-263
BYC8-600	8	600	60	2.90	8	150	600	52	1.0	TO-220-2 TO-220F-2 TO-263
BYC10-600	10	600	71	2.90	10	200	600	55	1.0	TO-220-2 TO-220F-2 TO-263
BYC15-600	15	600	220	2.90	15	200	600	55	1.0	TO-220-2 TO-220F-2 TO-263
BYC20-600	20	600	274	2.90	20	200	600	55	1.0	TO-220-2 TO-220F-2
BYC30-600*	30	600	274	3.20	30	200	600	55	1.0	TO-220-2 TO-220F-2
BYR29-600	8	600	66	1.50	8	10	600	75	1.0	TO-220-2 TO-220F-2
BYR79-600	15	600	143	1.38	15	50	600	60	10.0	TO-220-2 TO-220F-2
RS1002FL	1	200	30	1.15	1	1	200	150	0.5	SOD-123F
RS1006FL	1	600	30	1.30	1	1	600	250	0.5	SOD-123F
GS1010FL	1	1000	30	1.10	1	10	1000	-	-	SOD-123F
RS1010FL	1	1000	30	1.30	1	1	1000	500	0.5	SOD-123F
US1D	1	200	30	1.00	1	5	200	50	0.5	SMA
ES1D	1	200	30	0.95	1	5	200	35	0.5	SMA
ES1G	1	400	30	1.25	1	5	400	35	0.5	SMA
ES1J	1	600	30	1.25	1	5	600	35	0.5	SMA
RS1K	1	800	30	1.3	1	5	800	500	0.5	SMA
GS1M	1	1000	30	1.10	1	5	1000	-	-	SMAF
RS1M	1	1000	30	1.30	1	5	1000	500	0.5	SMA
US1M	1	1000	30	1.70	1	5	1000	75	0.5	SMA
ES2D	2	200	50	0.95	1	5	200	35	0.5	SMB
ES2J	2	600	50	1.70	2	5	600	35	0.5	SMB
S2M	2	1000	60	1.10	2	5	1000	-	-	SMB

## Dual Ultrafast Rectifier Diode

Part Number	Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°C)						Package
	I <sub>o</sub>	V <sub>RM</sub> (V <sub>R</sub> )	I <sub>FSM</sub> /Per Diode	V <sub>FM</sub>		I <sub>RM</sub> (I <sub>R</sub> )		trr(ns)		
				Rating	Conditions	Rating	Conditions	Rating	Conditions	
				(A)	(V)	(A)	MAX. (V)	IF(A)	MAX. (μA)	
SFR1020C	10	200	50	0.90	5	50	200	30	1.0	TO-220 TO-220F TO-3P TO-247
FCU20UC20	20	200	120	1.08	10	25	200	31	10.0	TO-220 TO-220F TO-3P TO-247
UAD92-02	20	200	100	0.95	10	200	200	40	0.1	TO-220 TO-220F TO-3P TO-247
UA60UP30	60	300	300	1.50	30	100	300	45	1.0	TO-220 TO-220F TO-3P TO-247
UUD80D40	80	400	300	1.50	40	10	400	108(Typ)	1.0	TO-220 TO-220F TO-3P TO-247
UMUR1660	16	600	100	1.50	8	5	600	35	1.0	TO-220 TO-220F TO-3P TO-247
UMUR16120*	16	1200	100	1.50	8	5	1200	55	1.0	TO-220 TO-220F TO-3P TO-247
UMUR3040*	30	400	150	1.25	8	10	400	60	1.0	TO-220 TO-220F TO-3P TO-247
UMUR3060	30	600	180	1.40	15	10	600	-	-	TO-220 TO-220F TO-3P TO-247
UMUR30120*	30	1200	150	1.50	8	10	1200	70	1.0	TO-220 TO-220F TO-3P TO-247
UMUR4060*	40	600	150	1.50	20	10	600	50	1.0	TO-220 TO-220F TO-3P TO-247
UMUR40120*	40	1200	150	1.50	20	10	1200	60	1.0	TO-220 TO-220F TO-3P TO-247
UMUR5060*	50	600	500	1.25	25	10	600	75	1.0	TO-220 TO-220F TO-3P TO-247
UMUR50120*	50	1200	500	1.25	25	10	1200	85	1.0	TO-220 TO-220F TO-3P TO-247
UFRP1660*	16	600	100	2.10	8	100	600	30	1.0	TO-220 TO-220F TO-3P TO-247
UFRP16120*	16	1200	100	3.20	8	100	1200	55	1.0	TO-220 TO-220F TO-3P TO-247
UFRP3060*	30	600	200	2.10	15	100	600	35	1.0	TO-220 TO-220F TO-3P TO-247
UFRP30120*	30	1200	200	3.20	15	100	1200	65	1.0	TO-220 TO-220F TO-3P TO-247
UFRP6030*	60	300	325	1.50	30	100	300	45	1.0	TO-220 TO-220F TO-3P TO-247
UFRP6060*	60	600	325	2.10	30	250	600	45	1.0	TO-220 TO-220F TO-3P TO-247
UFRP60120*	60	1200	325	3.20	30	250	1200	65	1.0	TO-220 TO-220F TO-3P TO-247
UFRP20060*	200	600	3600	1.40	100	200(mA)	600	200	200.0	DIODE MODULE(NON-ISOLATED)
UFRP200120*	200	1200	3600	1.40	100	200(mA)	1200	200	200.0	DIODE MODULE(NON-ISOLATED)

## Glass-passivated Rectifier Diode

Part Number	Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°C)						Package
	I <sub>o</sub>	V <sub>RM</sub> (V <sub>R</sub> )	I <sub>FSM</sub> /Per Diode	V <sub>FM</sub> /Per Diode		I <sub>RM</sub> (I <sub>R</sub> )		trr(ns)		
				Rating	Conditions	Rating	Conditions	Rating	Conditions	
				(A)	(V)	(A)	MAX. (V)	IF(A)	MAX. (μA)	
FR104G	1	400	30	1.30	1	5	400	150	0.5	DO-41
FR107G	1	1000	30	1.30	1	5	1000	500	0.5	DO-41
1N4004G	1	400	30	1.10	1	5	400	-	-	DO-41
1N4007G	1	1000	30	1.10	1	5	1000	-	-	DO-41
1N5401G	3	100	200	1.20	3	5	200	-	-	DO-201AD
1N5406G	3	600	200	1.20	3	5	600	-	-	DO-201AD
1N5408G	3	1000	200	1.20	3	5	1000	-	-	DO-201AD
MUR460	4	600	125	1.28	4	10	600	50	0.5	DO-201AD
HER504G	5	300	200	1.00	5	10	300	50	0.5	DO-201AD
SF18G	1	600	50	1.70	1	5	600	35	0.5	DO-15
SF26G	2	400	50	1.30	2	5	400	35	0.5	DO-15
SF28G	2	600	50	1.70	2	5	600	35	0.5	DO-15
SF36G	3	400	100	1.25	3	5	400	35	0.5	DO-201AD
SF56G	5	400	150	1.25	5	5	400	35	0.5	DO-201AD

## Small Signal Switching Diode

Part No.	Equivalent Circuit Diagram	Reverse Repetitive Voltage	Average Rectified Forward Current	Reverse Leakage Current		Forward Voltage Drop		Reverse Recovery Time	Capacitance	Power Dissipation	Package
		$V_{RRM}$	$I_{F(AV)}$	$I_R$	@ $V_R$	$V_F$	@ $I_F$	$t_{rr}$	$C_T@0V$	$P_{TOT}$	
		(V)	(mA)	( $\mu$ A)	(V)	(V)	(mA)	(ns)	(pF)	(mW)	
UMR11N*		80	100	0.10	70	1.2	100.0	4.0	3.5	200	SOT-363
1SS355		90	100	0.10	80	1.2	100.0	4.0	3.0	200	SOD-323
1SS400		90	100	0.10	80	1.2	100.0	4.0	-	150	SOD-523
MMBD914*		100	200	0.025/5.0	20/75	1.0	10.0	4.0	4.0	350	SOT-23
1N4148		100	200	0.025/5.0	20/75	1.0	10.0	4.0	4.0	400/200/200	SOD-123/SOD-323/ SOD-523
1N4148		100	200	0.025/5.0	20/75	1.0	10.0	4.0	4.0	350/270	SOT-23/SOT-323
MMBD4148		100	250	0.025/5.0	20/75	0.855	10.0	4.0	4.0	350	SOT-23
MMBD4148W*		100	200	0.025/5.0	20/75	0.855	10.0	4.0	4.0	200	SOT-323
MMBD4148T*		100	200	0.025/5.0	20/75	0.855	10.0	4.0	4.0	200	SOT-523
MMBD4148CA*		100	200	0.025/5.0	20/75	0.855	10.0	4.0	4.0	350	SOT-23
MMBD4148CC*		100	200	0.025/5.0	20/75	0.855	10.0	4.0	4.0	350	SOT-23
MMBD4148SE*		100	200	0.025/5.0	20/75	0.855	10.0	4.0	4.0	350	SOT-23
BAS16*		85	200	1.00	75.00	0.855	10.0	4.0	2.0	350	SOT-23
BAS16W*		85	200	1.00	75.00	0.855	10.0	4.0	2.0	200	SOT-323
BAS16T*		85	200	1.00	75.00	0.855	10.0	4.0	2.0	170	SOT-523
BAS16H*		85	200	1.00	75.00	0.855	10.0	4.0	2.0	380	SOD-123
BAV16J*		75	200	1.00	75.00	0.855	10.0	4.0	2.0	350	SOD-323
BAV16VY*		75	200	1.00	75.00	0.855	10.0	4.0	2.0	250	SOT-363
BAW56		75	150	0.025/2.5	20/75	0.715/0.855/1/1.25	1/10/50/150	4.0	2.0	350	SOT-23
BAW56W		75	150	0.025/2.5	20/75	0.715/0.855/1/1.25	1/10/50/150	4.0	2.0	200	SOT-323
BAW56T*		75	150	0.025/2.5	20/75	0.715/0.855/1/1.25	1/10/50/150	4.0	2.0	200	SOT-523
BAW56S*		75	150	0.025/2.5	20/75	0.715/0.855/1/1.25	1/10/50/150	4.0	2.0	200	SOT-363
BAV756S*		90	250	0.03/2.5	25/75	0.715/0.855/1/1.25	1/10/50/150	4.0	2.0	200	SOT-363
BAV70		75	150	0.025/2.5	20/75	0.715/0.855/1/1.25	1/10/50/150	4.0	2.0	350	SOT-23
BAV70W		75	150	0.025/2.5	20/75	0.715/0.855/1/1.25	1/10/50/150	4.0	2.0	200	SOT-323
BAV70T*		75	150	0.025/2.5	20/75	0.715/0.855/1/1.25	1/10/50/150	4.0	2.0	200	SOT-523
BAV70S*		75	150	0.025/2.5	20/75	0.715/0.855/1/1.25	1/10/50/150	4.0	2.0	200	SOT-363
BAL99*		70	215	0.03/1	25/70	0.715/0.855/1/1.25	1/10/50/150	4.0	1.5	200	SOT-523
BAL99W*		70	215	0.03/1	25/70	0.715/0.855/1/1.25	1/10/50/150	4.0	1.5	350	SOT-23
BAL99T*		70	215	0.03/1	25/70	0.715/0.855/1/1.25	1/10/50/150	4.0	1.5	200	SOT-323
BAV99		70	200	2.50	70.00	0.775/0.855/1/1.25	1/10/50/150	6.0	1.5	350/200/150	SOT-23/SOT-323/ SOT-523
BAV99		70	200	2.50	70.00	0.775/0.855/1/1.25	1/10/50/150	6.0	1.5	200	SOT-363

# DIODE

Part No.	Equivalent Circuit Diagram	Peak Reverse Voltage	Average Rectified Forward Current	Reverse Leakage Current		Forward Voltage Drop		Reverse Recovery Time	Capacitance	Power Dissipation	Package
		$V_{RM}$	$I_{F(AV)}$	$I_R$	@ $V_R$	$V_F$	@ $I_F$	$t_{rr}$	$C_T@0V$	$P_{TOT}$	
		(V)	(mA)	( $\mu$ A)	(V)	(V)	(mA)	(ns)	(pF)	(mW)	
BAS19*		120	200	0.10	100.00	1.0	100.0	50.0	5.0	350	SOT-23
BAS19W*		120	200	0.10	100.00	1.0	100.0	50.0	5.0	200	SOT-323
BAV20W		200	250	0.1	150	1.0/1.25	100/200	50.0	1.5	400/200	SOD-123 SOD-323
BAS20*		200	200	0.1	150	1.0/1.25	100/200	50.0	5.0	350	SOT-23
BAS20W*		200	200	0.1	150	1.0/1.25	100/200	50.0	5.0	200	SOT-323
BAS21		250	200	0.1	200	1.0/1.25	100/200	50.0	5.0	350	SOT-23
BAS21W*		250	200	0.1	200	1.0/1.25	100/200	50.0	5.0	200	SOT-323
MMBD3004*		350	225	0.1	240	0.87/1/1.25	20/100/200	50.0	5.0	350	SOT-23
BAV3004W*		350	225	0.1	240	0.87/1/1.25	20/100/200	50.0	5.0	400	SOD-123
MMBD3004BRM*		350	225	0.1	240	0.87/1/1.25	20/100/200	50.0	5.0	350	SOT-23 6L
MMBD3004CA*		350	225	0.1	240	0.87/1/1.25	20/100/200	50.0	5.0	350	SOT-23
MMBD3004CC*		350	225	0.1	240	0.87/1/1.25	20/100/200	50.0	5.0	350	SOT-23
MMBD3004SE*		350	225	0.1	240	0.87/1/1.25	20/100/200	50.0	5.0	350	SOT-23
MMBD5004BRM*		400	225	0.1	240	0.87/1/1.25	20/100/200	50.0	2.0	350	SOT-23 6L
1SS397*		420	100	0.1/1	300/400	0.9/1.3	10/100	500.0	5.0	200	SOT-323

## Low Leakage Switching Diode

Part No.	Equivalent Circuit Diagram	Peak Reverse Voltage	Average Rectified Forward Current	Reverse Leakage Current		Forward Voltage Drop		Reverse Recovery Time	Capacitance	Power Dissipation	Package
		$V_{RM}$	$I_{F(AV)}$	$I_R$	@ $V_R$	$V_F$	@ $I_F$	$t_{rr}$	$C_T@0V$	$P_{TOT}$	
		(V)	(mA)	( $\mu$ A)	(V)	(V)	(mA)	(ns)	(pF)	(mW)	
BAS116*		85	215	0.005	75	0.9/1.0 1.1/1.25	1/10/50/150	3000	2	200	SOT-323
BAS116W*		85	215	0.005	75	0.9/1.0 1.1/1.25	1/10/50/150	3000	2	350	SOT-23
BAW156*		85	200	0.005	75	0.9/1.0 1.1/1.25	1/10/50/150	3000	2	200	SOT-323
BAW156W*		85	200	0.005	75	0.9/1.0 1.1/1.25	1/10/50/150	3000	2	350	SOT-23
BAV170*		85	200	0.005	75	0.9/1.0 1.1/1.25	1/10/50/150	3000	2	350	SOT-23
BAV170W*		85	200	0.005	75	0.9/1.0 1.1/1.25	1/10/50/150	3000	2	200	SOT-323
BAV199		85	160	0.005	75	0.9/1.0 1.1/1.25	1/10/50/150	3000	2	350	SOT-23
BAV199W		85	160	0.005	75	0.9/1.0 1.1/1.25	1/10/50/150	3000	2	200	SOT-323



## Small Signal Schottky Diode

Part No.	Equivalent Circuit Diagram	Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°)						Package
		V <sub>RM</sub> (V <sub>R</sub> )	I <sub>O</sub>	I <sub>FSM</sub>	Forward Voltage Drop		Reverse Current		Capacitance		
		(V)	(mA)	(mA)	V <sub>F</sub>	@I <sub>F</sub>	I <sub>R</sub>	@V <sub>R</sub>	C <sub>D</sub>	@V <sub>R</sub> /Freq.	
SD103CW*		20	350.00	1500.00	0.37/0.6	20/200	5.0	10.0	50 typ	0/1	SOD-123 SOD-523
SD103CWS*		20	350.00	1500.00	0.37/0.6	20/200	5.0	10.0	50 typ	0/1	SOD-323
SD103BW*		30	350.00	1500.00	0.37/0.6	20/200	5.0	20.0	50 typ	0/1	SOD-123 SOD-523
SD103BWS*		30	350.00	1500.00	0.37/0.6	20/200	5.0	20.0	50 typ	0/1	SOD-323
SD103AW		40	350.00	1500.00	0.37/0.6	20/200	5.0	30.0	50 typ	0/1	SOD-123 SOD-523
SD103AWS		40	350.00	1500.00	0.37/0.6	20/200	5.0	30.0	50 typ	0/1	SOD-323
SS0520*		20	500.00	5500.00	0.3/0.385	100/500	75.0	10.0	170 typ	0/1	SOD-123
SS0530*		30	500.00	5500.00	0.375/0.43	100/500	20.0	15.0	170 typ	0/1	SOD-123
SS0540*		40	500.00	5500.00	0.51	500	10.0	20.0	170 typ	0/1	SOD-123
RB491D*		25	1000.00	3000.00	0.45	1000	200.0	20.0	-	-	SOT-23
RB411D*		40	500.00	3000.00	0.3/0.5	10/500	30.0	10.0	20 typ	10/1	SOT-23
RB520G-30*		30	100.00	500.00	0.45	10	0.5	10.0	-	-	SOD-723
RB520S30*		30	200.00	1000.00	0.6	200	1.0	10.0	-	-	SOD-523
RB521G-30*		30	100.00	1000.00	0.35	10	10.0	10.0	-	-	SOD-723
RB521S30*		30	200.00	1000.00	0.5	200	30.0	10.0	-	-	SOD-523
BAT42W*		30	200.00	400.00	0.4/0.65/1	10/50/200	0.5	25.0	7 typ	1/1	SOD-123
BAT42WS*		30	200.00	400.00	0.4/0.65/1	10/50/200	0.5	25.0	7 typ	1/1	SOD-323
BAT43W*		30	200.00	400.00	0.33/0.45/1	2/15/200	0.5	25.0	7 typ	1/1	SOD-123
BAT43WS*		30	200.00	400.00	0.33/0.45/1	2/15/200	0.5	25.0	7 typ	1/1	SOD-323
BAT54WS*		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOD-323
BAT54TS		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOD-523
BAT54		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOT-23
BAT54A		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOT-23
BAT54C		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOT-23
BAT54S		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOT-23
BAT54W		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOT-323
BAT54AW		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOT-323
BAT54CW		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOT-323
BAT54SW		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOT-323
BAT54TB		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOT-523
BAT54ATB		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOT-523

# DIODE

Part No.	Equivalent Circuit Diagram	Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°)						Package
		V <sub>RM</sub> (V <sub>R</sub> ) (V)	I <sub>o</sub> (mA)	I <sub>FSM</sub> (mA)	Forward Voltage Drop		Reverse Current		Capacitance		
					V <sub>F</sub> (V)	@I <sub>F</sub> (mA)	I <sub>R</sub> (μA)	@V <sub>R</sub> (V)	C <sub>D</sub> (pF)	@V <sub>R</sub> /Freq. (V/MHz)	
BAT54CTB		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOT-523
BAT54RTB*		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOT-523
BAT54TW*		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOT-363
BAT54ADW		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOT-363
BAT54CDW		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOT-363
BAT54SDW		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOT-363
BAT54DW		30	200.00	600.00	0.32/0.4/0.5/0.8	1/10/30/100	2.0	25.0	10.0	1/1	SOT-363
RB551V-30*		30	500.00	2000.00	0.36/0.47	100/500	100.0	20.0	-	-	SOD-323
SD101CW*		40	15.000	2000.00	0.39/0.9	1/15	0.2	30.0	2.2	0/1	SOD-123
SD101CWS*		40	15.000	2000.00	0.39/0.9	1/15	0.2	30.0	2.2	0/1	SOD-323
SD101BW*		50	15.000	2000.00	0.4/0.95	1/15	0.2	40.0	2.1	0/1	SOD-123
SD101BWS*		50	15.000	2000.00	0.4/0.95	1/15	0.2	40.0	2.1	0/1	SOD-323
SD101AW*		60	15.000	2000.00	0.41/1	1/15	0.2	50.0	2	0/1	SOD-123
SD101AWS*		60	15.000	2000.00	0.41/1	1/15	0.2	50.0	2	0/1	SOD-323
RB731U*		40	30.00	200.00	0.37	1	1.0	10.0	2	1/1	SOT-23
RB731UTW*		40	30.00	200.00	0.37	1	0.98	25.0	5	1/1	SOT-363
RB751V-40		40	30.00	200.00	0.37	1	0.5	30.0	2 typ	1/1	SOD-323
RB751S40*		40	120.00	200.00	0.37	1	0.5	30.0	2 typ	1/1	SOD-523
RB751G-40*		40	30.00	200.00	0.37	1	0.5	30.0	2 typ	1/1	SOD-723
BAS40WS*		40	120.00	200.00	0.38/0.5/1	1/10/40	1.0	30.0	5.0	0/1	SOD-323
BAS40TS*		40	120.00	200.00	0.38/0.5/1	1/10/40	1.0	30.0	5.0	0/1	SOD-523
BAS40TG*		40	120.00	200.00	0.38/0.5/1	1/10/40	1.0	30.0	5.0	0/1	SOD-723
BAS40*		40	120.00	200.00	0.38/0.5/1	1/10/40	1.0	30.0	5.0	0/1	SOT-23
BAS40A*		40	120.00	200.00	0.38/0.5/1	1/10/40	1.0	30.0	5.0	0/1	SOT-23
BAS40C*		40	120.00	200.00	0.38/0.5/1	1/10/40	1.0	30.0	5.0	0/1	SOT-23
BAS40S*		40	120.00	200.00	0.38/0.5/1	1/10/40	1.0	30.0	5.0	0/1	SOT-23
BAS40W*		40	120.00	200.00	0.38/0.5/1	1/10/40	1.0	30.0	5.0	0/1	SOT-323
BAS40AW*		40	120.00	200.00	0.38/0.5/1	1/10/40	1.0	30.0	5.0	0/1	SOT-323
BAS40CW*		40	120.00	200.00	0.38/0.5/1	1/10/40	1.0	30.0	5.0	0/1	SOT-323
BAS40SW*		40	120.00	200.00	0.38/0.5/1	1/10/40	1.0	30.0	5.0	0/1	SOT-323
BAS40TW*		40	120.00	200.00	0.38/0.5/1	1/10/40	1.0	30.0	5.0	0/1	SOT-363

# DIODE

Part No.	Equivalent Circuit Diagram	Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°)							Package	
		V <sub>RM</sub> (V <sub>R</sub> ) (V)	I <sub>b</sub> (mA)	I <sub>FSM</sub> (mA)	Forward Voltage Drop		Reverse Current		Capacitance				
					V <sub>F</sub> (V)	@I <sub>F</sub> (mA)	I <sub>R</sub> (uA)	@V <sub>R</sub> (V)	C <sub>D</sub> (pF)	@V <sub>b</sub> /Freq. (V/MHz)			
BAS40ADW*		40	120.00	200.00	0.38/0.5/1		1/10/40		1.0	30.0	5.0	0/1	SOT-363
BAS40CDW*		40	120.00	200.00	0.38/0.5/1		1/10/40		1.0	30.0	5.0	0/1	SOT-363
BAS40SDW*		40	120.00	200.00	0.38/0.5/1		1/10/40		1.0	30.0	5.0	0/1	SOT-363
BAT721*		40	200.00	1000.00	0.3/0.42/0.55		10/100/200		15.0	30.0	50.0	0/1	SOT-23
BAT721A		40	200.00	1000.00	0.3/0.42/0.55		10/100/200		15.0	30.0	50.0	0/1	SOT-23
BAT721C		40	200.00	1000.00	0.3/0.42/0.55		10/100/200		15.0	30.0	50.0	0/1	SOT-23
BAT721S*		40	200.00	1000.00	0.3/0.42/0.55		10/100/200		15.0	30.0	50.0	0/1	SOT-23
BAT400D*		40	500.00	3000.00	0.3/0.55		10/500		50.0	30.0	125 typ	0/1	SOT-23
BAT750*		40	750.00	5500.00	0.28/0.35/0.42/0.49		50/250/500/750		100.0	30.0	175 typ	0/1	SOT-23
RB500V-40*		45	100.00	1000.00	0.45		10		1.0	10.0	6 typ	10/1	SOD-323
RB501V-40		45	100.00	1000.00	0.34/0.55		10/100		30.0	10.0	6 typ	10/1	SOD-323
BAS70WS*		70	70.00	100.00	0.41/0.75/1		1/10/15		0.1	50.0	2.0	0/1	SOD-323
BAS70TS*		70	70.00	100.00	0.41/0.75/1		1/10/15		0.1	50.0	2.0	0/1	SOD-523
BAS70		70	70.00	100.00	0.41/0.75/1		1/10/15		0.1	50.0	2.0	0/1	SOT-23
BAS70A		70	70.00	100.00	0.41/0.75/1		1/10/15		0.1	50.0	2.0	0/1	SOT-23
BAS70C		70	70.00	100.00	0.41/0.75/1		1/10/15		0.1	50.0	2.0	0/1	SOT-23
BAS70S		70	70.00	100.00	0.41/0.75/1		1/10/15		0.1	50.0	2.0	0/1	SOT-23
BAS70W		70	70.00	100.00	0.41/0.75/1		1/10/15		0.1	50.0	2.0	0/1	SOT-323
BAS70AW		70	70.00	100.00	0.41/0.75/1		1/10/15		0.1	50.0	2.0	0/1	SOT-323
BAS70CW		70	70.00	100.00	0.41/0.75/1		1/10/15		0.1	50.0	2.0	0/1	SOT-323
BAS70SW		70	70.00	100.00	0.41/0.75/1		1/10/15		0.1	50.0	2.0	0/1	SOT-323
BAS70TW*		70	70.00	100.00	0.41/0.75/1		1/10/15		0.1	50.0	2.0	0/1	SOT-363
BAS70ADW*		70	70.00	100.00	0.41/0.75/1		1/10/15		0.1	50.0	2.0	0/1	SOT-363
BAS70CDW*		70	70.00	100.00	0.41/0.75/1		1/10/15		0.1	50.0	2.0	0/1	SOT-363
BAS70SDW*		70	70.00	100.00	0.41/0.75/1		1/10/15		0.1	50.0	2.0	0/1	SOT-363

## Varactor Diode

Part No.	Equivalent Circuit Diagram	Maximum Ratings		Electrical Characteristics (T <sub>A</sub> =25°)							Package
		V <sub>RM</sub> (V)	I <sub>F</sub> (mA)	I <sub>R</sub> (nA)	r <sub>s</sub> ( $\Omega$ ) (TYP.)	Cd(Pf) (1V, 1MHz)	Cd(Pf) (28V, 1MHz)	Ratio Cd(1V)/Cd(2V)	Ratio Cd(1V)/Cd(28V)	Ratio Cd(25V)/Cd(28V)	
BB178		35	20.0	10.0	0.65	34.65~42.35	2.361~2.754	TYP.=1.30	MIN.=13.5	TYP.=1.08	SOD-523
BB179		35	20.0	10.0	0.60	18.22~21.26	1.951~2.225	TYP.=1.27	8.45~10.9	TYP.=1.05	SOD-523

## Bridge Diode

Part Number	Maximum Ratings			Electrical Characteristics (T <sub>A</sub> =25°)				Package
	I <sub>O</sub> (A)	V <sub>RM</sub> (V)	I <sub>FSM</sub> (A)	V <sub>FM</sub> Diode		I <sub>RM</sub> (I <sub>R</sub> )		
				Rating	Conditions	Rating	Conditions	
				MAX. (V)	IF(A)	MAX. (A)	V <sub>R</sub> (V)	
DB106G	1.0	560	50.0	1.10	1.0	10.0	560.0	DFM
DB107G	1.0	700	50.0	1.10	1.0	10.0	700.0	DFM

## ESD TVS

Part No.	Equivalent Circuit Diagram	MAX. Ratings		ESD		Electrical Characteristics (T <sub>a</sub> =25°)										Package
		P <sub>PK</sub> (8/20 uS)	I <sub>PP</sub> (8/20 uS)	IEC61000-4-2 KV (*MAX.)		V <sub>RWM</sub> (V)	V <sub>BR</sub>		I <sub>r</sub>		V <sub>C</sub> (8/20 uS)		C <sub>J</sub> (I/O to GND/IO)			
				Rating	Rating		Conditions	Rating	Conditions	Rating	Conditions					
		(W)	(A)	Contact	Air	MIN. (V)	MAX. (V)	MAX. (uA)	V <sub>RWM</sub> (V)	MAX. (V) *TYP.	I <sub>PP</sub> (A)	MAX. (pF) *TYP	V <sub>0</sub> f(MHz)			
SMA3V*		50	5.0	±8KV	±15KV	3.3	4.0	-	20	3.3	10.9	5.0	100.0	0/1	SOD-323 SOD-523	
SMA5V		50	5.0	±8KV	±15KV	5.0	6.0	-	5.0	5.0	14.5	5.0	80.0	0/1	SOD-323/SOD-523	
SMA7V*		120	-	±8KV	±15KV	7.0	7.5	-	0.15	7.0	22.7	8.8	85.0	0/1	SOD-323/SOD-523	
SMA8V*		120	-	±8KV	±15KV	8.0	8.5	-	5.0	8.0	13.0	5.0	70.0	0/1	SOD-323/SOD-523	
SMA12V*		120	-	±8KV	±15KV	12.0	13.3	-	5.0	12.0	17.0	5.0	60.0	0/1	SOD-323/SOD-523	
SMA15V*		120	-	±8KV	±15KV	15.0	16.6	-	5.0	15.0	22.0	5.0	50.0	0/1	SOD-323/SOD-523	
SMA24V*		120	-	±8KV	±15KV	24.0	26.7	-	5.0	24.0	32.0	3.0	25.0	0/1	SOD-323/SOD-523	
SMA36V*		120	-	±8KV	±15KV	36.0	40.0	-	5.0	36.0	55.0	1.0	20.0	0/1	SOD-323/SOD-523	
UESD03*		120	-	±8KV	±15KV	3.3	4.0	-	200	3.3	6.5	5.0	200.0	0/1	SOD-523	
UESD05*		120	-	±8KV	±15KV	5.0	6.0	-	5.0	5.0	9.0	5.0	110.0	0/1	SOD-523	
UESD07*		120	-	±8KV	±15KV	7.0	7.5	-	0.15	7.0	22.7	8.8	85.0	0/1	SOD-523	
UESD08*		120	-	±8KV	±15KV	8.0	8.5	-	5.0	8.0	13.0	5.0	70.0	0/1	SOD-523	
UESD12*		120	-	±8KV	±15KV	12.0	13.3	-	5.0	12.0	17.0	5.0	60.0	0/1	SOD-523	
UESD15*		120	-	±8KV	±15KV	15.0	16.6	-	5.0	15.0	22.0	5.0	50.0	0/1	SOD-523	
UESD24*		120	-	±8KV	±15KV	24.0	26.7	-	5.0	24.0	32.0	3.0	25.0	0/1	SOD-523	
UESD36*		120	-	±8KV	±15KV	36.0	40.0	-	5.0	36.0	55.0	1.0	20.0	0/1	SOD-523	
UZD03VA*		-	4.5	*±15KV	*±15KV	±3.3	4.0	6.5	1	±3.3	7.5	IEC61000-4-2 +6KV Contact	16.5	0/1	SOT-523	
UZD03VCF*		-	5.0	*±15KV	*±15KV	±3.3	4.0	6.5	1	±3.3	7	IEC61000-4-2 +6KV Contact	16.5	0/1	DFN1.0X0.6-2L(P0.65)	
UZD03VCD*		-	-	*±15KV	*±15KV	±3.3	4.0	6.5	1	±3.3	*8.5	IEC61000-4-2 +6KV Contact	14.0	0/1	SOT-23	
UZA05VF*		-	-	*±10KV	*±15KV	5.0	6.0	-	1	5.0	12.0	IEC61000-4-2 +6KV Contact	1.0	2.5/1	DFN1.0X0.6-2L(P0.65)	
UZD05VA*		-	-	*±15KV	*±15KV	±5.0	6.0	9.0	1	±5.0	10.0	IEC61000-4-2 +6KV Contact	9.0	0/1	SOT-523	
UZD05VCF*		-	-	*±8KV	*±15KV	±5.0	7.0	10.5	1	±5.0	*25	IEC61000-4-2 +6KV Contact	0.65	0/1	DFN1.0X0.6-2L(P0.65)	
UZD05VCD*		-	-	*±15KV	*±15KV	±5.0	5.8	9.0	1	±5.0	*11.5	IEC61000-4-2 +6KV Contact	8.0	0/1	SOT-23	

Part No.	Equivalent Circuit Diagram	MAX. Ratings		ESD		Electrical Characteristics (T <sub>v</sub> =25S)									Package
		P <sub>PK</sub> (8/20 uS)	I <sub>PP</sub> (8/20 uS)	IEC61000-4-2 KV (*MAX.)		V <sub>RWM</sub> (V)	V <sub>BR</sub>		I <sub>R</sub>		V <sub>C</sub> (8/20 uS)		C <sub>J</sub> (I/O to GND./IO)		
				Contact	Air		Rating	Rating	Conditions	Rating	Conditions	Rating	Conditions		
		(W)	(A)			MIN. (V)	MAX. (V)	MAX. (uA)	V <sub>RWM</sub> (V)	MAX. (V) *TYP.	I <sub>PP</sub> (A)	MAX. (pF) *TYP	V <sub>sw</sub> (MHz)		
UMMBZ5V6*		150	-	±8KV	±15KV	3.3	5.32	5.88	5.0	3.3	9.0	5.0	90.0	0/1	SOT-23
UMMBZ6V2*		150	-	±8KV	±15KV	4.3	5.89	6.51	0.5	4.3	11.0	5.0	70.0	0/1	SOT-23
UMMBZ6V8*		150	-	±8KV	±15KV	5.0	6.46	7.14	0.5	5.0	10.0	5.0	100.0	0/1	SOT-23
UMMBZ15V*		150	-	±8KV	±15KV	12.0	14.3	15.8	0.1	12.0	24.0	6.0	80.0	0/1	SOT-23
UMMBZ27V*		150	-	±8KV	±15KV	22.0	25.65	28.35	0.05	22.0	36.0	4.0	50.0	0/1	SOT-23
SM05C*		300	17.0	±8KV	±15KV	5.0	6.0	-	20.0	5.0	9.8	1.0	400.0	0/1	SOT-23
SM12C*		300	12.0	±8KV	±15KV	12.0	13.3	-	1.0	12.0	19.0	1.0	150.0	0/1	SOT-23
SM15C*		300	10.0	±8KV	±15KV	15.0	16.7	-	1.0	15.0	24.0	1.0	100.0	0/1	SOT-23
SM24C*		300	5.0	±8KV	±15KV	24.0	26.7	-	1.0	24.0	43.0	1.0	60.0	0/1	SOT-23
SM36C*		300	4.0	±8KV	±15KV	36.0	40.0	-	1.0	36.0	60.0	1.0	45.0	0/1	SOT-23
SLVUJ2.8		400	24	±8KV	±15KV	2.8	3.0	-	1	2.8	15	24	100.0	0/1	SOT-23
UDLC03D*		400	-	±8KV	±15KV	3.3	4.0	-	50.0	3.3	8.0	5.0	1.2	0/1	SOT-23
UDLC05D*		400	-	±8KV	±15KV	5.0	6.0	-	20.0	5.0	11.0	5.0	0.7	0/1	SOT-23
UDLC12D*		400	-	±8KV	±15KV	12.0	13.3	-	1.0	12.0	24.0	5.0	1.2	0/1	SOT-23
UDLC15D*		400	-	±8KV	±15KV	15.0	16.7	-	1.0	15.0	30.0	5.0	1.2	0/1	SOT-23
UDLC24D*		400	-	±8KV	±15KV	24.0	26.7	-	1.0	24.0	55.0	5.0	1.2	0/1	SOT-23
SOT05*		500	30.0	±8KV	±15KV	5.0	6.0	-	5.0	5.0	10.0	20.0	550.0	0/1	SOT-23
SOT12*		500	24.0	±8KV	±15KV	12.0	13.3	-	5.0	12.0	25.0	20.0	200.0	0/1	SOT-23
SOT15*		500	20.0	±8KV	±15KV	15.0	16.7	-	5.0	15.0	30.0	20.0	170.0	0/1	SOT-23
SOT24*		500	18.0	±8KV	±15KV	24.0	26.7	-	5.0	24.0	45.0	15.0	150.0	0/1	SOT-23
SOT36*		500	9.0	±8KV	±15KV	36.0	40.0	-	5.0	36.0	72.0	7.0	80.0	0/1	SOT-23

Part No.	Equivalent Circuit Diagram	MAX. Ratings		ESD		Electrical Characteristics (T <sub>j</sub> =25S)									Package
		P <sub>PK</sub> (8/20 uS)	I <sub>PP</sub> (8/20 uS)	IEC61000-4-2 KV (*MAX.)		V <sub>RWM</sub> (V)	V <sub>BR</sub>		I <sub>R</sub>		V <sub>C</sub> (8/20 uS)		C <sub>J</sub> (I/O to GND./IO)		
				Contact	Air		Rating	MAX. (V)	Rating	Conditions	Rating	Conditions	Rating	Conditions	
		(W)	(A)				MIN. (V)	MAX. (V)	MAX. (uA)	V <sub>RWM</sub> (V)	MAX. (V) *TYP.	I <sub>PP</sub> (A)	MAX. (pF) *TYP	V <sub>0</sub> /f(MHz)	
SOT05C		140	13.0	±8KV	±15KV	5.0	6.0	-	20	5.0	11.2	13.0	120.0	0/1	SOT-23
SOT12C*		500	24.0	±8KV	±15KV	12.0	13.3	-	5.0	12.0	25.0	20.0	100.0	0/1	SOT-23
SOT15C*		500	20.0	±8KV	±15KV	15.0	16.7	-	5.0	15.0	30.0	20.0	90.0	0/1	SOT-23
SOT24C*		500	18.0	±8KV	±15KV	24.0	26.7	-	5.0	24.0	45.0	15.0	80.0	0/1	SOT-23
SOT36C*		500	9.0	±8KV	±15KV	36.0	40.0	-	5.0	36.0	72.0	7.0	45.0	0/1	SOT-23
UESDA25W*		400	-	±8KV	±15KV	24.0	25.0	30.0	1	24.0	-	-	65.0	0/1	SOT-323
UESDA6V1W5		150	15.0	±8KV	±15KV	3.0	6.1	7.2	1	3.0	-	-	90.0	0/1	SOT-353
UESDA25W5*		150	-	±8KV	±15KV	24.0	25.0	30.0	1	24.0	-	-	30.0	0/1	SOT-353
UESDA3V3-5W6*		150	15.0	±8KV	±15KV	3.3	4.2	-	30.0	3.3	10.9	15.0	120.0	0/1	SOT-363
UZ5C056		150	10.0	±8KV	±15KV	5.0	6.3	-	1	5.0	14.5	10.0	100.0	0/1	SOT-26
USMS05		350	24.0	±8KV	±15KV	5.0	6.0	-	20	5.0	14.5	24.0	400.0	0/1	SOT-26
USMS12*		350	12.0	±8KV	±15KV	12.0	13.3	-	1	12.0	19.0	1.0	80.0	0/1	SOT-26
USMS15*		350	12.0	±8KV	±15KV	15.0	16.7	-	1	15.0	24.0	1.0	50.0	0/1	SOT-26
USMS24*		350	12.0	±8KV	±15KV	24.0	40	-	1	24.0	26.7	1.0	40.0	0/1	SOT-26
USMS05C*		350	12.0	±8KV	±15KV	5.0	6.0	-	20	5.0	9.8	1.0	150.0	0/1	SOT-26
USMS12C*		350	12.0	±8KV	±15KV	12.0	13.3	-	1	12.0	19.0	1.0	80.0	0/1	SOT-26
USMS15C*		350	12.0	±8KV	±15KV	15.0	16.7	-	1	15.0	24.0	1.0	50.0	0/1	SOT-26
USMS24C*		350	12.0	±8KV	±15KV	24.0	40	-	1	24.0	26.7	1.0	40.0	0/1	SOT-26
PUSB230*		45.0	5.0	*±8KV	*±8KV	5.5	7.0	-	0.1	2.5	8.0	1.0	0.7	2.5/1	SOT-23
PUSB430*		45.0	5.0	*±8KV	*±9KV	5.5	7.0	-	0.1	2.5	8.0	1.0	0.8	2.5/1	DFN2.5X1.0-10L(P0.5)
USD5V02D*		-	-	±8KV	±15KV	5.5	6.0	9.0	0.1	5.0	-	-	*1.0	0/1	SOT-26
UPRTR5V0U4D		-	-	±8KV	±15KV	5.5	6.0	9.0	0.1	3.0	-	-	*1.0	3/1	SOT-26
PUSB220		-	-	±8KV	-	5.5	6.0	9.0	0.1	3.0	-	-	*1.0	3/1	SOT-26
SRV05-4		300	12.0	±8KV	±15KV	5.0	6.0	-	5.0	5.0	17	5.0	1.2	0/1	SOT-26

Part No.	Equivalent Circuit Diagram	MAX. Ratings		ESD		Electrical Characteristics (T <sub>A</sub> =25°C)									Package
		P <sub>PK</sub> (8/20 uS)	I <sub>PP</sub> (8/20 uS)	IEC61000-4-2 KV (*MAX.)		V <sub>VRWM</sub> (V)	V <sub>BR</sub>		I <sub>R</sub>		V <sub>C</sub> (8/20 uS)		C <sub>J</sub> (I/O to GND./I/O)		
				Rating	Rating		Rating	Conditions	Rating	Conditions	Rating	Conditions			
		(W)	(A)	Contact	Air	MIN. (V)	MAX. (V)	MAX. (uA)	V <sub>RRM</sub> (V)	MAX. (V) *TYP.	I <sub>PP</sub> (A)	MAX. (pF) *TYP	V <sub>SI</sub> f(MHz)		
UUSB220*		-	5.0	*±16KV	*±16KV	5.0	7.0	10.0	1.0	5.0	*8.5	5.0	1.9	0/1	SOT-23
UUSB420*		-	5.5	±8KV	±15KV	5.0	6.2	-	2.0	5.0	10.0	5.0	1.2	5.0/1	SOT-26
ULCDA05*		400	17.0	±8KV	±15KV	5.0	6.0	-	5.0	5.0	12.0	5.0	1.2	0/1	SOP-8
ULCDA12*		400	12.0	±8KV	±15KV	12.0	13.3	-	1.0	12.0	24.0	5.0	1.2	0/1	SOP-8
ULCDA15*		400	10.0	±8KV	±15KV	15.0	16.7	-	1.0	15.0	30.0	5.0	1.2	0/1	SOP-8
ULCDA24*		400	7.0	±8KV	±15KV	24.0	26.7	-	1.0	24.0	55.0	5.0	1.2	0/1	SOP-8

ESD & EMI TVS

Part No.	Equivalent Circuit Diagram	MAX. Ratings		ESD		Electrical Characteristics (T <sub>A</sub> =25°C)									Package
		P <sub>SS</sub> (W)	I <sub>PP</sub> (5/50 nS) (A)	IEC61000-4-2 KV (*MAX.)		V <sub>VRWM</sub> (V)	V <sub>BR</sub>		I <sub>R</sub>		Resistor		C <sub>J</sub> (I/O to GND./I/O)		
				Rating	Rating		Rating	Conditions	R <sub>S</sub> (Ω) Typical	R <sub>PU</sub> (KΩ) Typical	Rating	Conditions			
		(W)	(A)	Contact	Air	MIN. (V)	MAX. (V)	MAX. (uA)	V <sub>RRM</sub> (V)	Typical	Typical	Typical (pF)	V <sub>SI</sub> f(MHz)		
USM203-15*		5.25	6.0	-	5.0	5.25	15.0	1.5	60	0/1	100	40.0	±10KV	±16KV	SOT-26
USM203-22*		5.25	6.0	-	5.0	5.25	22.0	1.5	60	0/1	100	40.0	±10KV	±16KV	SOT-26
USM203-33*		5.25	6.0	-	5.0	5.25	33.0	1.5	60	0/1	100	40.0	±10KV	±16KV	SOT-26
URCZ1284-04		5.50	-	-	10.0	5.00	33.0	4.7/4.7	150	-	1	-	±8KV	±15KV	QSOP-28
URCZ1284-02		5.50	-	-	10.0	5.00	33.0	2.2/2.2	150	-	1	-	±8KV	±15KV	QSOP-28

600W Transient Voltage Suppressor

Part No.		WORKING PEAK REVERSE VOLTAGE VRWM (V)	BREAKDOWN VOLTAGE VBR @ IT			MAXIMUM CLAMPING VOLTAGE VC (V) @ IPP	MAXIMUM REVERSE SURGE CURRENT IPP (A)	MAXIMUM REVERSE LEAKAGE IR (uA) @ VRWM	Package
UNI	BI		MIN (V)	TYP (V)	Test Current IT (mA)				
P6KE6.8	P6KE6.8C	5.5	6.12	7.48	10	10.8	55.56	1000	DO-15
P6KE6.8A	P6KE6.8CA	5.8	6.46	7.14	10	10.5	57.14	1000	DO-15
P6KE7.5	P6KE7.5C	6.1	6.75	8.25	10	11.7	51.28	500	DO-15
P6KE7.5A	P6KE7.5CA	6.4	7.13	7.88	10	11.3	53.10	500	DO-15
P6KE8.2	P6KE8.2C	6.6	7.38	9.02	10	12.5	48.00	200	DO-15
P6KE8.2A	P6KE8.2CA	7.0	7.79	8.61	10	12.1	49.59	200	DO-15
P6KE9.1	P6KE9.1C	7.4	8.19	10.01	1	13.8	43.48	50	DO-15
P6KE9.1A	P6KE9.1CA	7.8	8.65	9.56	1	13.4	44.78	50	DO-15
P6KE10	P6KE10C	8.1	9.00	11.00	1	15.0	40.00	10	DO-15
P6KE10A	P6KE10CA	8.6	9.50	10.50	1	14.5	41.38	10	DO-15
P6KE11	P6KE11C	8.9	9.90	12.10	1	16.2	37.04	5	DO-15
P6KE11A	P6KE11CA	9.4	10.45	11.55	1	15.6	38.46	5	DO-15
P6KE12	P6KE12C	9.7	10.80	13.20	1	17.3	34.68	5	DO-15
P6KE12A	P6KE12CA	10.2	11.40	12.60	1	16.7	35.93	5	DO-15
P6KE13	P6KE13C	10.5	11.70	14.30	1	19.0	31.58	1	DO-15
P6KE13A	P6KE13CA	11.1	12.35	13.65	1	18.2	32.97	1	DO-15
P6KE15	P6KE15C	12.1	13.50	16.50	1	22.0	27.27	1	DO-15
P6KE15A	P6KE15CA	12.8	14.25	15.75	1	21.2	28.30	1	DO-15
P6KE16	P6KE16C	12.9	14.40	17.60	1	23.5	25.53	1	DO-15
P6KE16A	P6KE16CA	13.6	15.20	16.80	1	22.5	26.67	1	DO-15
P6KE18	P6KE18C	14.5	16.20	19.80	1	26.5	22.64	1	DO-15
P6KE18A	P6KE18CA	15.3	17.10	18.90	1	25.2	23.81	1	DO-15
P6KE20	P6KE20C	16.2	18.00	22.00	1	29.1	20.62	1	DO-15
P6KE20A	P6KE20CA	17.1	19.00	21.00	1	27.7	21.66	1	DO-15



Part No.		WORKING PEAK REVERSE VOLTAGE VRWM (V)	BREAKDOWN VOLTAGE VBR @ IT			MAXIMUM CLAMPING VOLTAGE VC (V) @ IPP	MAXIMUM REVERSE SURGE CURRENT IPP (A)	MAXIMUM REVERSE LEAKAGE IR (µA) @ VRWM	Package
UNI	BI		MIN (V)	TYP (V)	Test Current IT (mA)				
P6KE22	P6KE22C	17.8	19.80	24.20	1	31.9	18.81	1	DO-15
P6KE22A	P6KE22CA	18.8	20.90	23.10	1	30.6	19.61	1	DO-15
P6KE24	P6KE24C	19.4	21.60	26.40	1	34.7	17.29	1	DO-15
P6KE24A	P6KE24CA	20.5	22.80	25.20	1	33.2	18.07	1	DO-15
P6KE27	P6KE27C	21.8	24.30	29.70	1	39.1	15.35	1	DO-15
P6KE27A	P6KE27CA	23.1	25.65	28.35	1	37.5	16.00	1	DO-15
P6KE30	P6KE30C	24.3	27.00	33.00	1	43.5	13.79	1	DO-15
P6KE30A	P6KE30CA	25.6	28.50	31.50	1	41.4	14.49	1	DO-15
P6KE33	P6KE33C	26.8	29.70	36.30	1	47.7	12.58	1	DO-15
P6KE33A	P6KE33CA	28.2	31.35	34.65	1	45.7	13.13	1	DO-15
P6KE36	P6KE36C	29.1	32.40	39.60	1	52.0	11.54	1	DO-15
P6KE36A	P6KE36CA	30.8	34.20	37.80	1	49.9	12.02	1	DO-15
P6KE39	P6KE39C	31.6	35.10	42.90	1	56.4	10.64	1	DO-15
P6KE39A	P6KE39CA	33.3	37.05	40.95	1	53.9	11.13	1	DO-15
P6KE43	P6KE43C	34.8	38.70	47.30	1	61.9	9.69	1	DO-15
P6KE43A	P6KE43CA	36.8	40.85	45.15	1	59.3	10.12	1	DO-15
P6KE47	P6KE47C	38.1	42.30	51.70	1	67.8	8.85	1	DO-15
P6KE47A	P6KE47CA	40.2	44.65	49.35	1	64.8	9.26	1	DO-15
P6KE51	P6KE51C	41.3	45.90	56.10	1	73.5	8.16	1	DO-15
P6KE51A	P6KE51CA	43.6	48.45	53.55	1	70.1	8.56	1	DO-15
P6KE56	P6KE56C	45.4	50.40	61.60	1	80.5	7.45	1	DO-15
P6KE56A	P6KE56CA	47.8	53.20	58.80	1	77.0	7.79	1	DO-15
P6KE62	P6KE62C	50.2	55.80	68.20	1	89.0	6.74	1	DO-15
P6KE62A	P6KE62CA	53.0	58.90	65.10	1	85.0	7.06	1	DO-15
P6KE68	P6KE68C	55.1	61.20	74.80	1	98.0	6.12	1	DO-15
P6KE68A	P6KE68CA	58.1	64.60	71.40	1	92.0	6.52	1	DO-15
P6KE75	P6KE75C	60.7	67.50	82.50	1	108.0	5.56	1	DO-15
P6KE75A	P6KE75CA	64.1	71.25	78.75	1	103.0	5.83	1	DO-15
P6KE82	P6KE82C	66.4	73.80	90.20	1	118.0	5.08	1	DO-15
P6KE82A	P6KE82CA	70.1	77.90	86.10	1	113.0	5.31	1	DO-15
P6KE91	P6KE91C	73.7	81.90	100.10	1	131.0	4.58	1	DO-15
P6KE91A	P6KE91CA	77.8	86.45	95.55	1	125.0	4.80	1	DO-15
P6KE100	P6KE100C	81.0	90.00	110.00	1	144.0	4.17	1	DO-15
P6KE100A	P6KE100CA	85.5	95.00	105.00	1	137.0	4.38	1	DO-15
P6KE110	P6KE110C	89.2	99.00	121.00	1	158.0	3.80	1	DO-15
P6KE110A	P6KE110CA	94.0	104.50	115.50	1	152.0	3.95	1	DO-15
P6KE120	P6KE120C	97.2	108.00	132.00	1	173.0	3.47	1	DO-15
P6KE120A	P6KE120CA	102.0	114.00	126.00	1	165.0	3.64	1	DO-15
P6KE130	P6KE130C	105.0	117.00	143.00	1	187.0	3.21	1	DO-15
P6KE130A	P6KE130CA	111.0	123.50	136.50	1	179.0	3.35	1	DO-15
P6KE150	P6KE150C	121.0	135.00	165.00	1	215.0	2.79	1	DO-15
P6KE150A	P6KE150CA	128.0	142.50	157.50	1	207.0	2.90	1	DO-15
P6KE160	P6KE160C	130.0	144.00	176.00	1	230.0	2.61	1	DO-15
P6KE160A	P6KE160CA	136.0	152.00	168.00	1	219.0	2.74	1	DO-15
P6KE170	P6KE170C	138.0	153.00	187.00	1	244.0	2.46	1	DO-15
P6KE170A	P6KE170CA	145.0	161.50	178.50	1	234.0	2.56	1	DO-15
P6KE180	P6KE180C	146.0	162.00	198.00	1	258.0	2.33	1	DO-15
P6KE180A	P6KE180CA	154.0	171.00	189.00	1	246.0	2.44	1	DO-15
P6KE200	P6KE200C	162.0	180.00	220.00	1	287.0	2.09	1	DO-15
P6KE200A	P6KE200CA	171.0	190.00	210.00	1	274.0	2.19	1	DO-15
P6KE220	P6KE220C	175.0	198.00	242.00	1	344.0	1.74	1	DO-15
P6KE220A	P6KE220CA	185.0	209.00	231.00	1	328.0	1.83	1	DO-15
P6KE250	P6KE250C	202.0	225.00	275.00	1	360.0	1.67	1	DO-15
P6KE250A	P6KE250CA	214.0	237.50	262.50	1	344.0	1.74	1	DO-15
P6KE300	P6KE300C	243.0	270.00	330.00	1	430.0	1.40	1	DO-15
P6KE300A	P6KE300CA	256.0	285.00	315.00	1	414.0	1.45	1	DO-15
P6KE350	P6KE350C	284.2	315.00	385.00	1	504.0	1.19	1	DO-15
P6KE350A	P6KE350CA	299.3	332.50	367.50	1	482.0	1.24	1	DO-15
P6KE380	P6KE380C	308.6	342.00	418.00	1	547.2	1.10	1	DO-15
P6KE380A	P6KE380CA	324.9	361.00	399.00	1	524.4	1.14	1	DO-15
P6KE400	P6KE400C	324.8	360.00	440.00	1	574.0	1.05	1	DO-15
P6KE400A	P6KE400CA	342.0	380.00	420.00	1	548.0	1.09	1	DO-15
P6KE440	P6KE440C	357.3	396.00	484.00	1	633.6	0.95	1	DO-15
P6KE440A	P6KE440CA	376.2	418.00	462.00	1	607.2	0.99	1	DO-15
P6KE500	P6KE500C	406.0	450.00	550.00	1	720.0	0.83	1	DO-15
P6KE500A	P6KE500CA	427.5	475.00	525.00	1	690.0	0.87	1	DO-15
P6KE520	P6KE520C	422.2	468.00	572.00	1	748.8	0.80	1	DO-15
P6KE520A	P6KE520CA	444.6	494.00	546.00	1	717.6	0.84	1	DO-15
P6KE550	P6KE550C	446.6	495.00	605.00	1	792.0	0.76	1	DO-15
P6KE550A	P6KE550CA	470.3	522.50	577.50	1	759.0	0.79	1	DO-15
P6KE600	P6KE600C	487.2	540.00	660.00	1	864.0	0.69	1	DO-15
P6KE600A	P6KE600CA	513.0	570.00	630.00	1	828.0	0.72	1	DO-15