

Power Diodes – Ultra-Fast Recovery — continued

TO-220 Soft-Recovery

Rugged devices designed to withstand reverse voltage transients. Guaranteed reverse surge and ESD capability.

I <sub>F</sub> (av) A	I <sub>FSM</sub> A	t <sub>rr</sub> max. ns	V <sub>F</sub> max. V	Package	Mfr.	Mfrs. List No./ Series...
8	100	28	2.0	TO-220	ON	MURH840CT
10	120	25	1.25	TO-220	GS	UG10DCT
10	120	50	1.3	TO-220	GS	UG10GCT
16	100	85	1.2	TO-220	ON	MUR1620CTR

FOR PACKAGE OUTLINES SEE PAGE 425

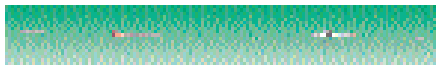
SD261

V <sub>RRM</sub> max., V	Mfrs. List No.	Order Code	1+	25+	100+	250+
200	MUR1620CTR	708-124				
400	MURH840CT	708-264				
			1+	25+	100+	1K+
200	UG10DCT	.743-793 †				
400	UG10GCT	.743-800 †				

† Available until stocks are exhausted

Power Diodes – Controlled Avalanche

Controlled Avalanche



Controlled avalanche diodes snub repetitive reverse voltage spikes between specified voltage limits – a common problem in switch mode power supplies, telephony, TV and monitor deflection circuits and other inductive switching circuits.

I <sub>F</sub> av A	V <sub>RRM</sub> max. V	V <sub>(BR)R</sub> min. V	V <sub>(BR)R</sub> max. V	I <sub>R</sub> mA	V <sub>F</sub> max. V	I <sub>F</sub> @ A	Package	Mfr.	Mfrs. List No.
0.4	90	120	475	1.0	0.9	0.1	DO-35	PS	BAX12A
2.0	1000	—	1600	0.1	1.0	1.0	SOD-57	TFK	BYW56

SD277

Order Multiple=5	Price Each
Mfrs. List No.	5+ 100+ 1K+ 3K+
BAX12A	367-229
BYW56	995-198

Power Diodes – Schottky

Surface Mount



I <sub>F</sub> (AV) A	T <sub>C</sub> °C	V <sub>RRM</sub> V	V <sub>FM</sub> max. V	I <sub>RM</sub> max. mA	Package	Mfr.	Mfrs. List No.
0.5	105	20	0.385	—	SOD-123	ON	MBR0520LT1
0.5	105	30	0.43	—	SOD-123	ON	MBR0530T1
0.5	110	40	0.53	—	SOD-123	ON	MBR0540T1
0.77	110	60	0.57	1.0	SMA	IR	10MQ060N
0.77	110	90	0.81	1.0	SMA	IR	10MQ100N
1.0	78	15	0.34	0.5	SMB	IR	10BQ015
1.0	100	20	0.45	0.4	PowerMite	ON	MBRM120LT3
1.0	120	30	0.395	—	SMB	ON	MBRS130LT3
1.0	105	30	0.41	25.0	SMA	ON	MBRA130LT3
1.0	100	40	0.6	25.0	SMA	ON	MBRA140T3
1.0	115	40	0.6	1.0	SMB	ON	MBRS140T3
1.0	100	40	0.55	0.4	PowerMite	ON	MBRM140T3
1.0	60	40	0.55	0.5	melf	ST	TMBYV10-40
1.0	112	40	0.53	0.1	SMB	IR	10BQ040
1.0	25	60	0.7	0.5	melf	ST	TMBYV10-60
1.0	120	100	0.75	0.5	SMB	ON	MBRS1100T3
1.0	124	100	0.86	0.1	SMB	IR	10BQ100
1.1	110	40	0.51	1.0	SMA	IR	10MQ040N
1.5	—	45	0.5	0.5	SOD-106A	TFK	BYS10/45
2.0	105	30	0.5	0.5	SMB	FCH	SS23
2.0	105	40	0.5	0.5	SMB	FCH	SS24
2.0	105	60	0.7	0.7	SMB	FCH	SS26
3.0	78	15	0.34	1.0	SMC	IR	30BQ015
3.0	112	40	0.52	0.5	SMC	IR	30BQ040
3.0	100	40	0.525	2.0	SMC	ON	MBRS340T3
3.0	125	40	0.6	—	D-Pak	ON	MBRD340
3.0	100	60	0.74	—	SMC	ON	MBRS360T3
3.0	125	60	0.7	—	D-Pak	ON	MBRD360
3.0	124	100	0.84	0.1	SMC	IR	30BQ100
3.3	105	40	0.62	2.0	D-Pak	IR	30WQ04FN
3.3	105	60	0.7	2.0	D-Pak	IR	30WQ06FN
3.3	105	100	0.91	1.0	D-Pak	IR	30WQ10FN
5.5	92	40	0.65	3.0	D-Pak	IR	50WQ04FN
5.5	92	60	0.7	3.0	D-Pak	IR	50WQ06FN
5.5	92	100	0.93	1.0	D-Pak	IR	50WQ10FN
2 3	130	40	0.7	—	D-Pak	ON	MBRD640CT
2 3	130	60	0.7	—	D-Pak	ON	MBRD660CT
6.6	122	40	0.55	3.0	D-Pak	IR	6CWQ04FN
6.6	122	60	0.58	3.0	D-Pak	IR	6CWQ06FN
6.6	122	100	0.85	3.0	D-Pak	IR	6CWQ10FN
2 5	90	35	0.49	—	D-Pak	ON	MBRD1035CTL
2 7.5	105	45	0.72	15.0	D2-Pak	ON	MBRB1545CT
2 10	110	60	0.85	150.0	D2-Pak	ON	MBRB2060CT
2 12.5	110	35	0.47	10.0	D2-Pak	ON	MBRB2535CTL

SD202

Order Multiple=1

Mfrs. List No.	Order Code	1+	25+	100+	250+	1K+
BYS10/45	995-587					
MBR0520LT1	708-136					
MBR0530T1	229-6548					
MBR0540T1	708-148					
MBRA130LT3	300-4120					
MBRA140T3	300-4340					
MBRB1545CT	229-5982					
MBRB2060CT	229-6019					
MBRB2535CTL	878-418					
MBRD340	708-173 †					
MBRD360	708-185					
MBRD640CT	708-197					
MBRD660CT	708-203 †					
MBRD1035CTL	708-215					
MBRM120LT3	300-4612					
MBRM140T3	300-4880					
MBRS130LT3	708-150					
MBRS140T3	878-157					
MBRS340T3	878-390					
MBRS360T3	708-161					
MBRS1100T3	247-170					
SS23	646-910					
SS24	646-921					
SS26	646-933					
TMBYV10-40	742-612					
TMBYV10-60	742-600					
10BQ015	506-722					
10BQ040	506-734					
10BQ100	506-746					

Order Multiple=5

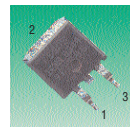
Mfrs. List No.	Order Code	5+	25+	100+	250+	1K+
10MQ040N	995-678					
10MQ060N	995-680					
10MQ100N	995-691					

Order Multiple=1

Mfrs. List No.	Order Code	1+	25+	100+	250+	1K+
30WQ04FN	995-710					
30WQ06FN	995-721					
30WQ10FN	995-733					
50WQ04FN	995-745					
50WQ06FN	995-757					
50WQ10FN	995-769					
6CWQ04FN	995-770					
6CWQ06FN	995-782					
6CWQ10FN	995-794					
30BQ015	646-908					
30BQ040	506-758					
30BQ100	506-760					

† Available until stocks are exhausted

TO-263



Pin Config. 1 2 3

(a) K K A

(b) A K A

The TO-263 is a surface mount version of the TO-220. Capable of housing large die, the package handles large currents with a low forward voltage drop.

I <sub>F</sub> (av) A	I <sub>FSM</sub> A	I <sub>FRM</sub> A	V <sub>RRM</sub> V	V <sub>FM</sub> @ I <sub>FM</sub> V	I <sub>RM</sub> @ V <sub>FM</sub> mA	Package and Pin Out	Mfrs. List No.
7.5	150	15	45	0.57	0.1	TO-263 (a)	MBRB745
16.0	150	32	60	0.65	1.0	TO-263 (a)	MBRB1660
20.0	150	20	45	0.57	0.1	TO-263 (b)	MBRB2045CT

SD279

Mfrs. List No.	Order Code	1+	25+	100+
MBRB745	.706-218			
MBRB1660	.706-255			
MBRB2045CT	.706-267			

3.5A to 100A

I <sub>F</sub> (av) A	V <sub>FRM</sub> V	V <sub>F</sub> V	@ I <sub>F</sub> A	I <sub>SM</sub> A	Package	Mfrs. List No.
<b>Single Diode Configuration</b>						
3.5	30	0.34	3	535	D-Pak	30WQ03FN
5.5	30	0.32	5	320	D-Pak	50WQ03FN
7	30	0.34	7	535	D-Pak	6CWQ03FN
8	30	0.44	8	2400	DO-204AR	80SQ030
20	15	0.25	19	700	TO-220AC	20L15T
100	15	0.38	100	5000	PowlRtab®	100BGQ015
<b>Dual Diode Configuration</b>						
12	30	0.34	6	620	D-Pak	12CWQ03FN
12	60	0.52	6	350	D-Pak	12CWQ06FN
12	100	0.61	6	370	D-Pak	12CWQ10FN
30	45	0.60	15	2000	TO-220	MBR3045CT
30	60	0.56	20	1000	TO-220	30CT0060
30	90	0.67	15	920	TO-247	30CP0090
30	140	0.78	15	1000	TO-247	30CPQ140
40	15	0.25	19	700	TO-220	40L15CT
40	15	0.25	19	700	TO-247	40L15CW
40	20	0.34	20	1000	TO-220	47CT0020
40	20	0.34	20	1000	D2-Pak	47CT0020S
40	30	0.38	20	1100	TO-220	42CT0030
40	45	0.48	20	1240	TO-220	40CT0045



continued