



Micro Commercial Components



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MUR1005 THRU MUR1060

10 Amp Super Fast Glass Passivated Rectifier 50 to 600 Volts

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Glass passivated chip
- Super fast switching time for high efficiency
- High surge capacity
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

- Operating Temperature: - 55°C to +150°C
- Storage Temperature: - 55°C to +150°C

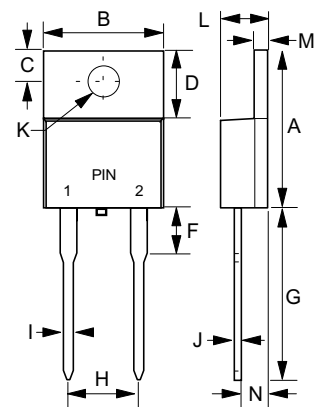
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR1005	MUR1005	50V	35V	50V
MUR1010	MUR1010	100V	70V	100V
MUR1020	MUR1020	200V	140V	200V
MUR1040	MUR1040	400V	280V	400V
MUR1060	MUR1060	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10.0A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	100A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element 1005-1020 1040-1060	V_F	1.30V 1.5V	$I_{FM} = 10A$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5uA 250uA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Maximum Reverse Recovery Time 1005-1020 1040-1060	T_{rr}	35ns 50ns	$I_F = 0.5A, I_R = 1.0A,$ $I_{rr} = 0.25A$
Typical Junction Capacitance	C_J	160pF	Measured at 1.0MHz, $V_R = 4.0V$

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a.

TO-220AC



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.100	.135	2.54	3.43	
D	.230	.270	5.84	6.86	
F	-----	.250	-----	6.35	
G	.500	.580	12.70	14.73	
H	.190	.210	4.83	5.33	
I	.020	.045	0.51	1.14	
J	.012	.025	0.30	0.64	
K	.139	.161	3.53	4.09	Ø
L	.140	.190	3.56	4.83	
M	.045	.055	1.14	1.40	
N	.080	.115	2.03	2.92	

FIG.1 - FORWARD CURRENT DERATING CURVE

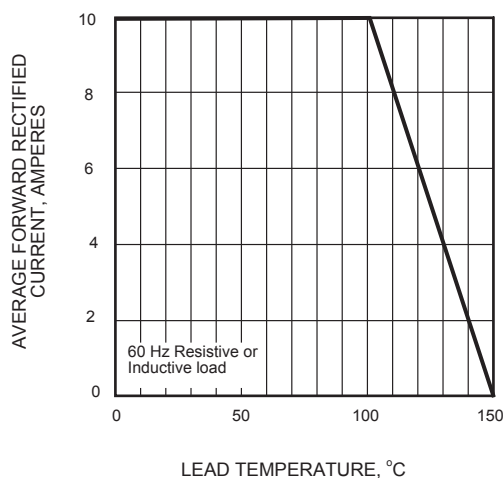


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

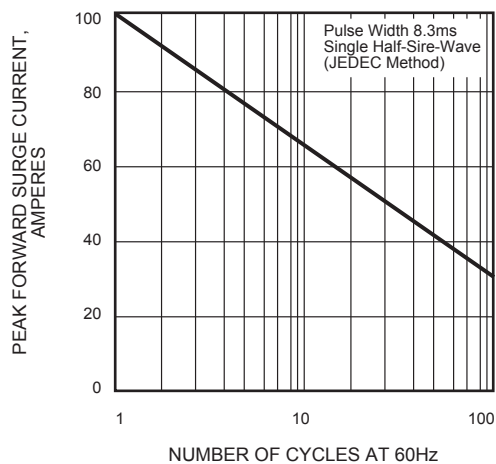


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

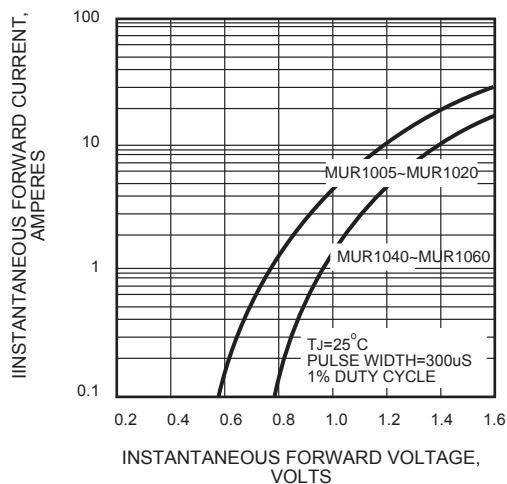


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

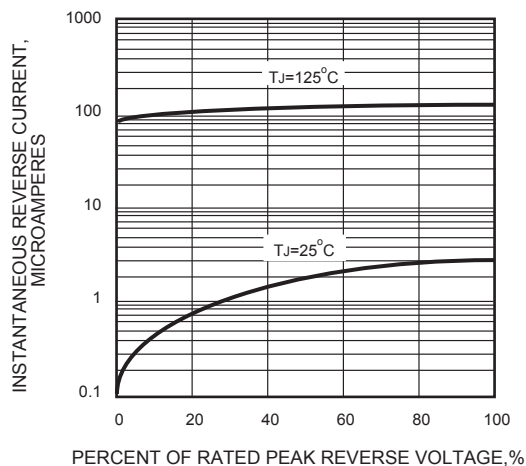
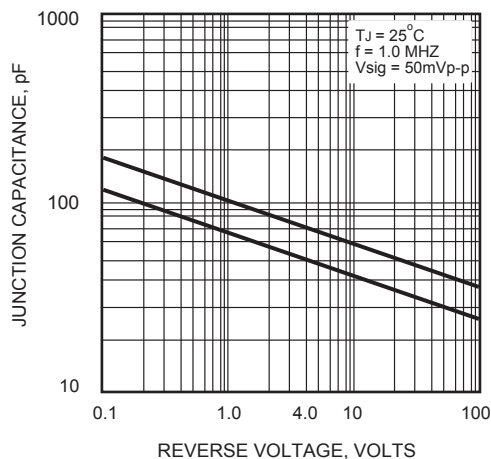


FIG.5 - TYPICAL JUNCTION CAPACITANCE



Ordering Information

Device	Packing
(Part Number)-BP	Bulk;1Kpcs/Box

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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