

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Glass Passivated Chip
- Super Fast Switching Time For Hight Efficiency
- High Surge Capacity
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 2.0°C/W Junction to Case
- Thermal Resistance: 60°C/W Junction to Ambient

MCC Part 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	$I_{F(AV)}$	10A	$T_C=100^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	100A	8.3ms, Half Sine
Maximum Forward Voltage Drop Per Element MUR1005-MUR1020 MUR1040-MUR1060	V_F	1.3V 1.5V	$I_{FM}=10\text{A};$ $T_J=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0 μA 250 μA	$T_J=25^\circ\text{C};$ $T_J=125^\circ\text{C}$
Maximum Reverse Recovery Time MUR1005-MUR1020 MUR1040-MUR1060	T_{RR}	35ns 50ns	$I_F=0.5\text{A}; I_R=1.0\text{A};$ $I_{rr}=0.25\text{A}$
Typical Junction Capacitance	C_J	160pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

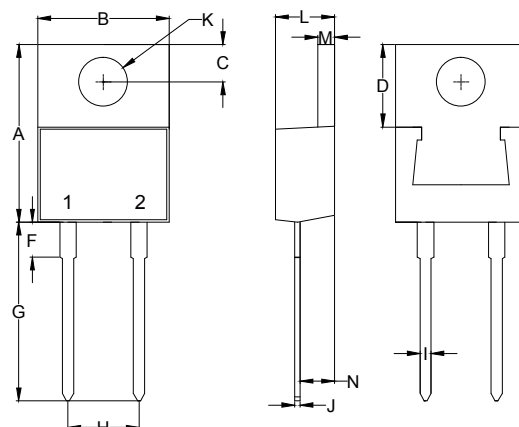
Note :1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

Internal Structure



10 Amp Super Fast Glass Passivated Rectifier 50 to 600 Volts

TO-220AC



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.560	0.625	14.22	15.88	
B	0.380	0.420	9.65	10.67	
C	0.100	0.135	2.54	3.43	
D	0.230	0.270	5.84	6.86	
F	-----	0.250	-----	6.35	
G	0.500	0.580	12.70	14.73	
H	0.190	0.210	4.83	5.33	
I	0.020	0.045	0.51	1.14	
J	0.012	0.025	0.30	0.64	
K	0.139	0.161	3.53	4.09	Φ
L	0.140	0.190	3.56	4.83	
M	0.045	0.055	1.14	1.40	
N	0.080	0.115	2.03	2.92	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

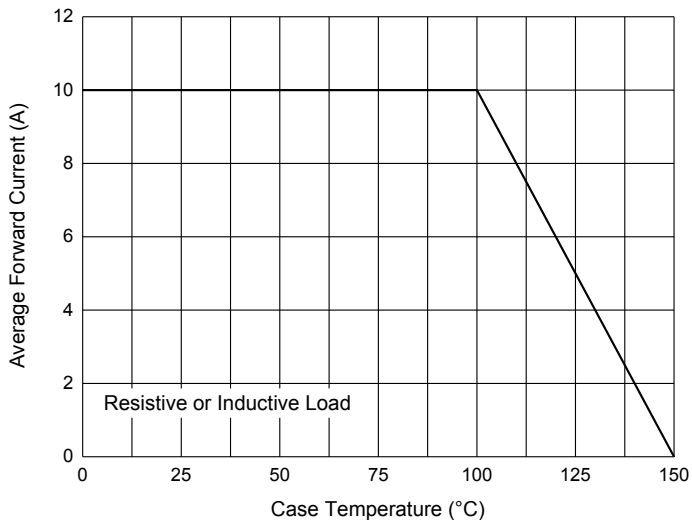


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

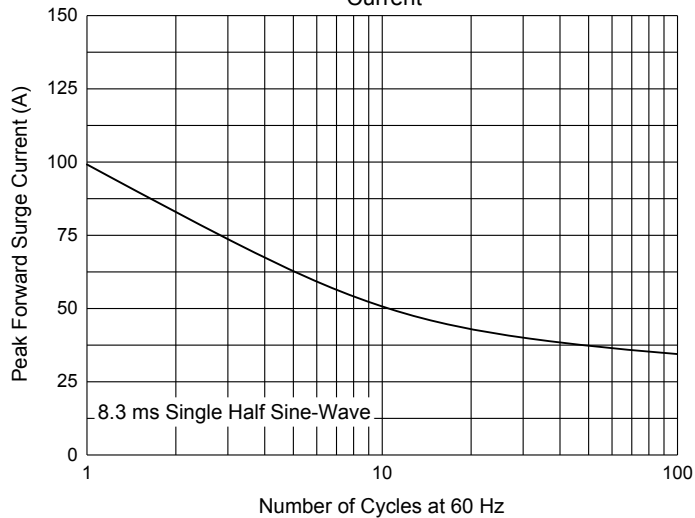


Fig. 3 - Typical Instantaneous Forward Characteristics

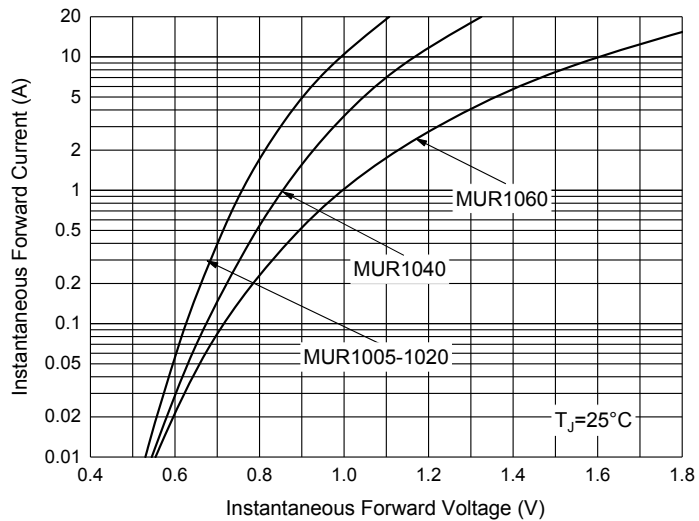
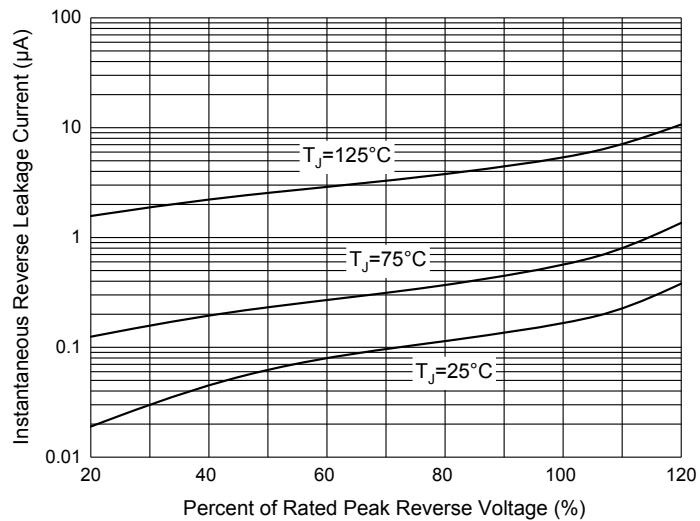


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-BP	Bulk:50pcs/Tube, 1Kpcs/Box, 5Kpcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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