



**THE DATASHEET OF  
MUR1020F-BP**



**Features**

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- 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
- Typical Thermal Resistance: 2.5°C/W Junction to Case

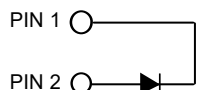
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR1020F	MUR1020F	200V	140V	200V
MUR1040F	MUR1040F	400V	280V	400V
MUR1060F	MUR1060F	600V	420V	600V

**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current	$I_{F(AV)}$	10A	$T_C=100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	125A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	MUR1020F: 1.15V MUR1040F: 1.5V MUR1060F: 1.6V	$I_F=10A$ $T_J=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0µA 500µA	$T_J=25^\circ\text{C};$ $T_J=125^\circ\text{C}$
Maximum Reverse Recovery Time	$t_{rr}$	MUR1020F: 35ns MUR1040F-MUR1060F: 50ns	$I_F=0.5A; I_R=1.0A;$ $I_{REC}=0.25A$

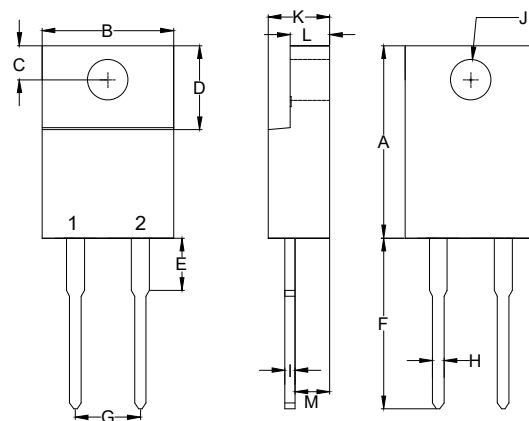
Note :1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

**Internal Structure**



**10 Amp Super Fast Rectifier  
200 to 600 Volts**

**ITO-220AC**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.567	0.606	14.40	15.40	
B	----	0.406	----	10.30	
C	0.100	0.112	2.55	2.85	
D	0.248	0.272	6.30	6.90	
E	----	0.161	----	4.10	
F	0.500	0.543	12.70	13.80	
G	0.200		5.10		
H	----	0.035	----	0.90	
I	----	0.032	----	0.80	
J	0.102	0.134	2.60	3.40	Φ
K	----	0.189	----	4.80	
L	----	0.123	----	3.10	
M	0.098	0.114	2.50	2.90	

**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

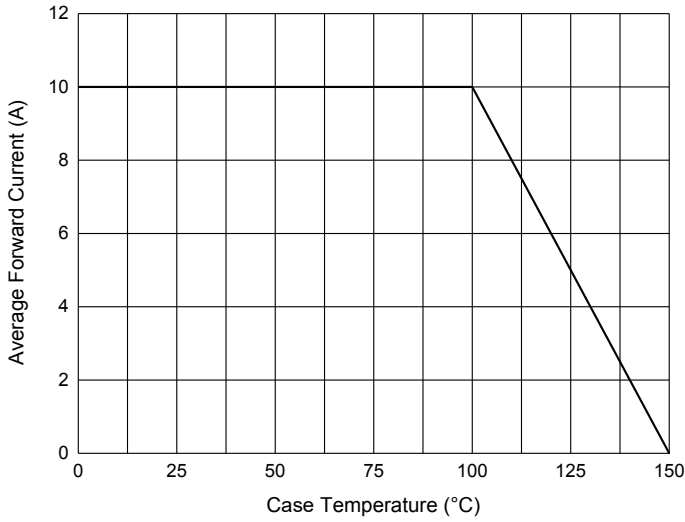


Fig. 3 - Maximum Non-Repetitive Peak Forward Surge Current

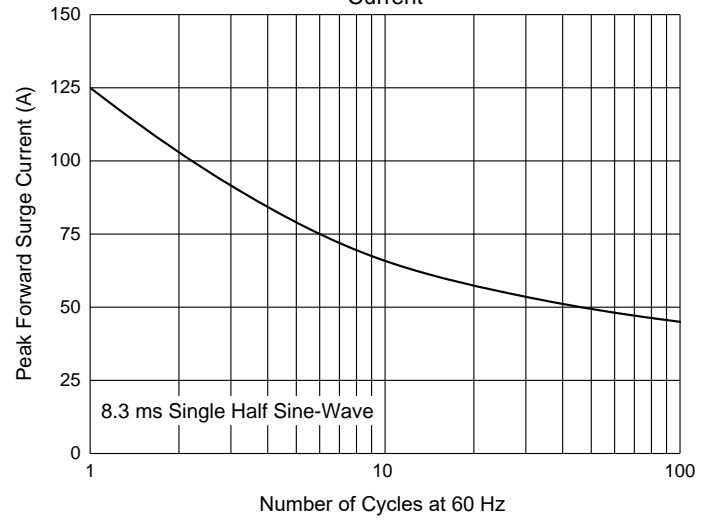


Fig. 3 - Typical Instantaneous Forward Characteristics

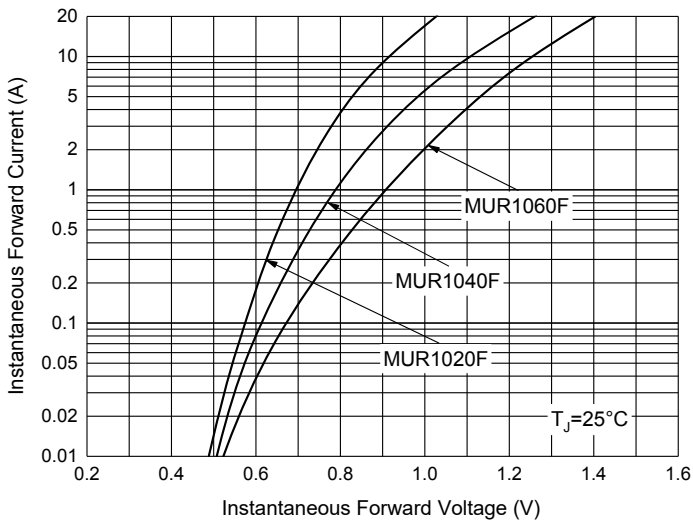
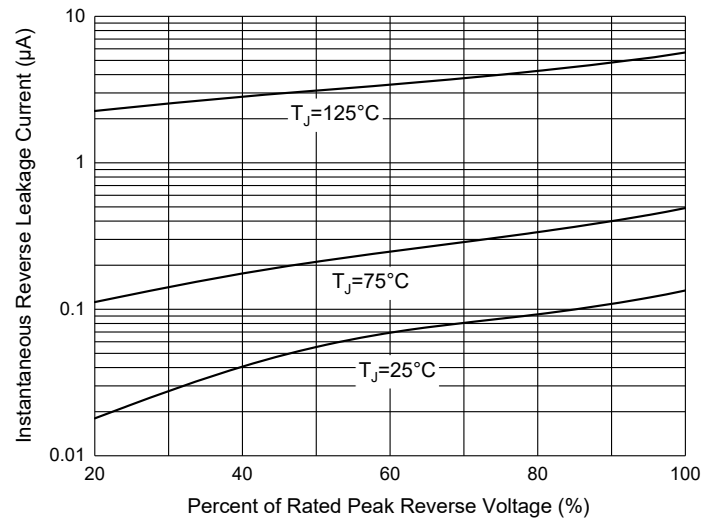


Fig. 4 - Typical Reverse Leakage Characteristics



## 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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