

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Low Power Loss And High Efficiency
- Low Forward Voltage , High Current Capability
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: -50°C to +150°C
- Storage Temperature Range: -50°C to +150°C
- Typical thermal resistance: 3°C/W Junction to Case

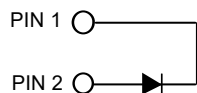
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR1020F	MBR1020F	20V	14V	20V
MBR1030F	MBR1030F	30V	21V	30V
MBR1040F	MBR1040F	40V	26V	40V
MBR1050F	MBR1050F	50V	35V	50V
MBR1060F	MBR1060F	60V	42V	60V
MBR1080F	MBR1080F	80V	56V	80V
MBR1090F	MBR1090F	90V	63V	90V
MBR10100F	MBR10100F	100V	80V	100V

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}	150A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	0.55V 0.75V 0.85V	$I_{FM}=10\text{A}$ $T_J=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.1mA 10mA	$T_C=25^\circ\text{C};$ $T_C=100^\circ\text{C}$

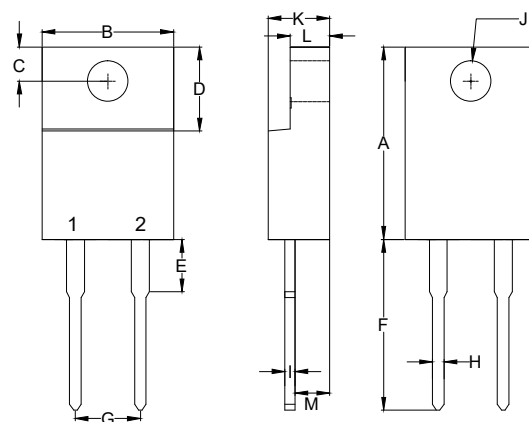
Note :1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

Internal Structure



10 Amp Schottky Barrier Rectifier 20 to 100 Volts

ITO-220AC



DIM	INCHES		MM		NOTE
	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

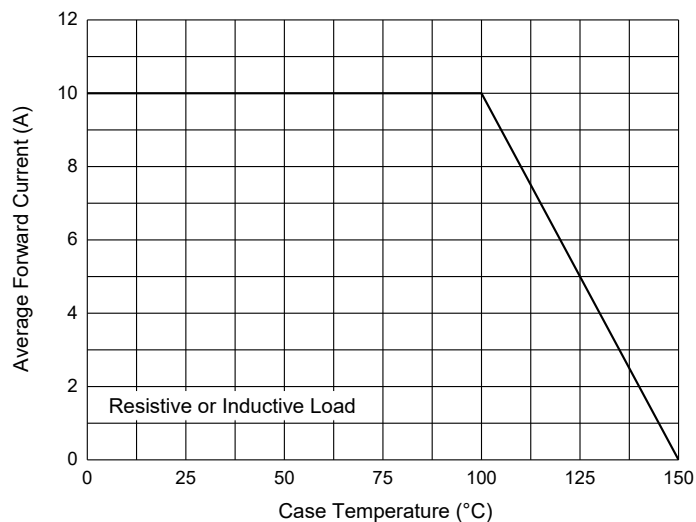


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

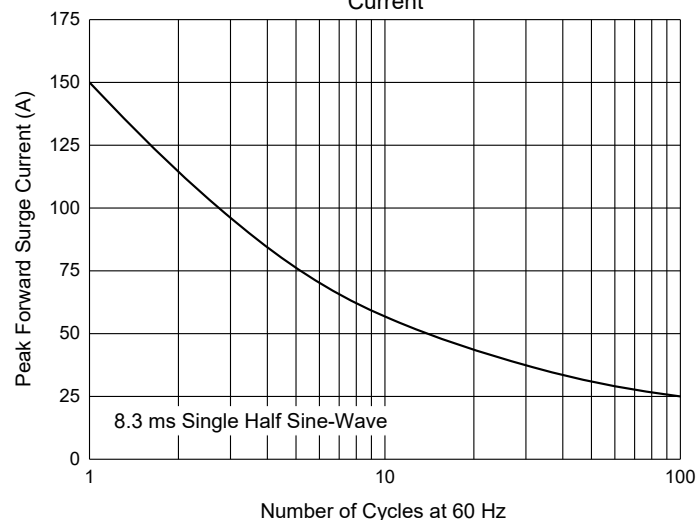


Fig. 3 - Typical Instantaneous Forward Characteristics

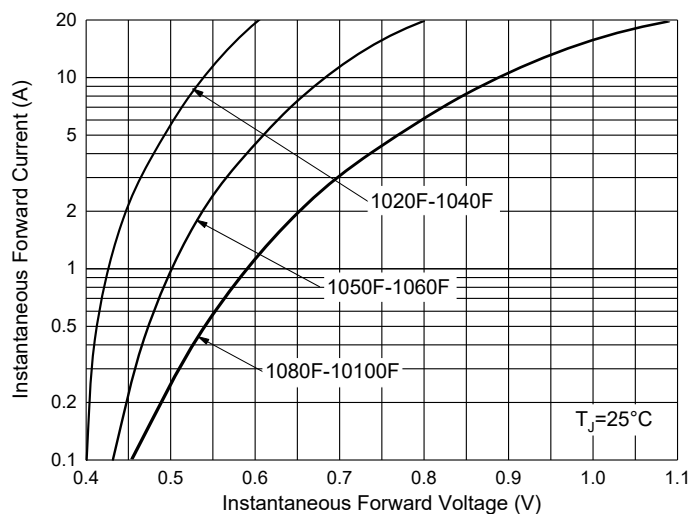
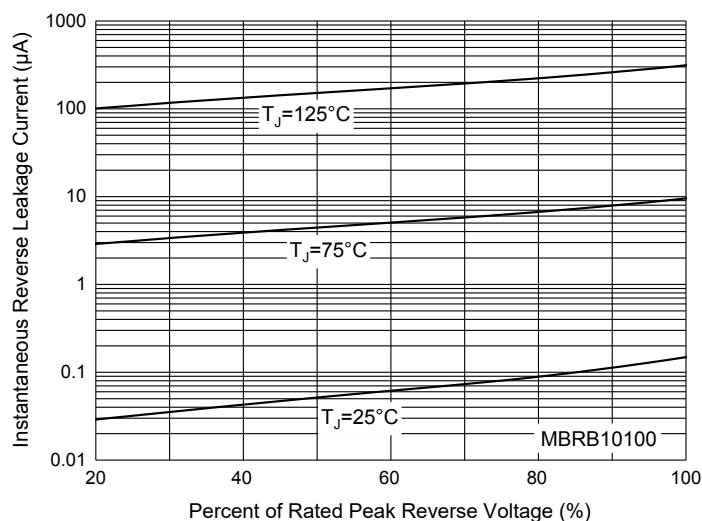


Fig. 4 - Typical Reverse Leakage Characteristics



Curve Characteristics

Fig. 5- Forward Current Derating Curve

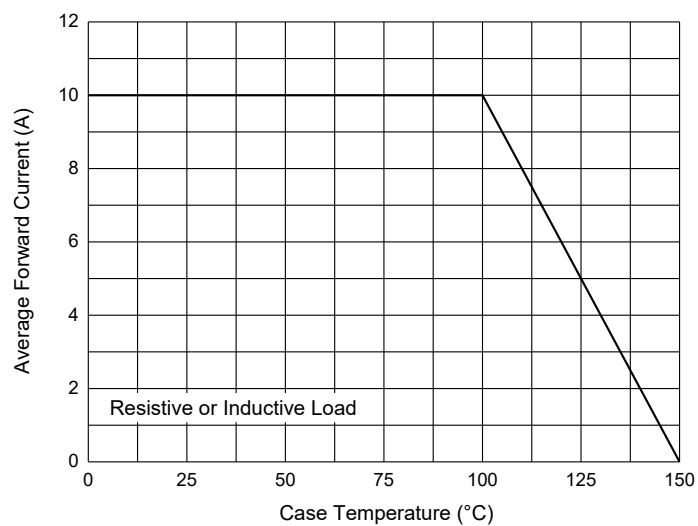
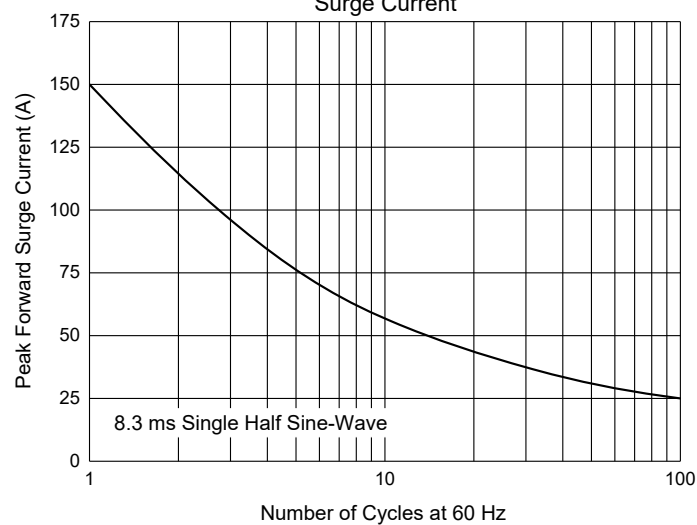


Fig. 6 - Maximum Non-Repetitive Peak Forward Surge Current



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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