

Features

- High Frequency Operation
- High Current Capability and High Efficiency
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Low Forward Voltage Drop
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C
- Typical Thermal Resistance : 4°C/W Junction to Case

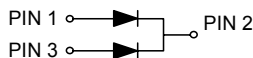
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR10100FCTH	MBR10100FCTH	100V	70V	100V
MBR10150FCTH	MBR10150FCTH	150V	105V	150V
MBR10200FCTH	MBR10200FCTH	200V	140V	200V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10A	$T_C=150^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	120A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage MBR10100FCTH MBR10150FCTH MBR10200FCTH	V_F	0.8V 0.85V 0.9V	$I_{FM}=5A$ $T_A=25^\circ\text{C}$
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.01mA 5mA	$T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$
Typical Junction Capacitance	C_J	100pF	Measured at 1.0MHz, $V_R=4.0V$

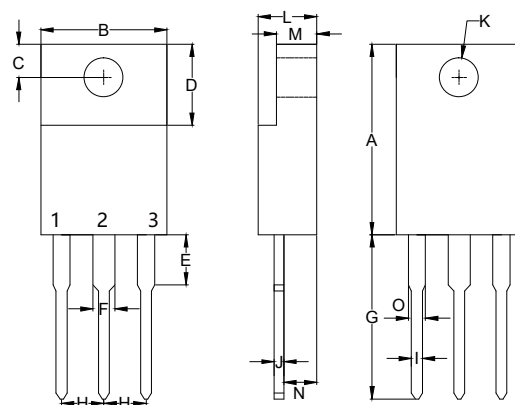
Note :1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

Internal Structure



10 Amp Schottky Barrier Rectifier 100 to 200 Volts

ITO-220AB



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.567	0.642	14.40	16.30	
B	-----	0.421	-----	10.70	
C	0.085	0.128	2.15	3.25	
D	0.248	0.272	6.30	6.90	
E	-----	0.177	-----	4.50	
F	-----	0.071	-----	1.80	
G	0.500	0.539	12.70	14.20	
H	0.100		2.55		
I	-----	0.035	-----	0.90	
J	-----	0.032	-----	0.80	
K	0.102	0.150	2.60	3.80	Φ
L	-----	0.201	-----	5.10	
M	-----	0.140	-----	3.56	
N	0.083	0.126	2.10	3.20	
O	-----	0.071	-----	1.80	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

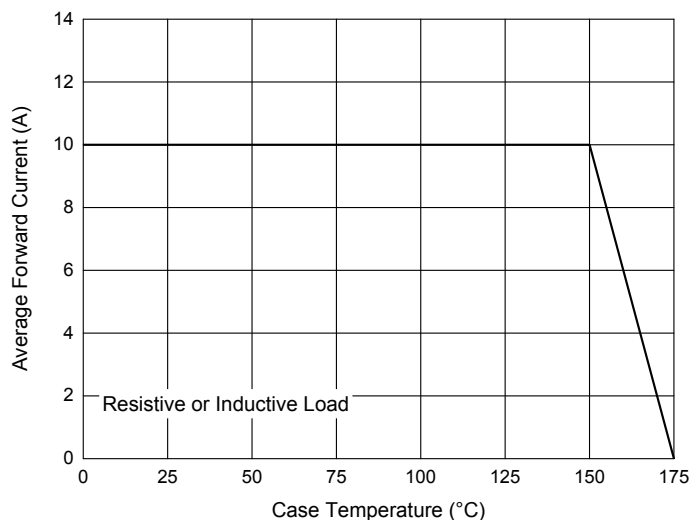


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

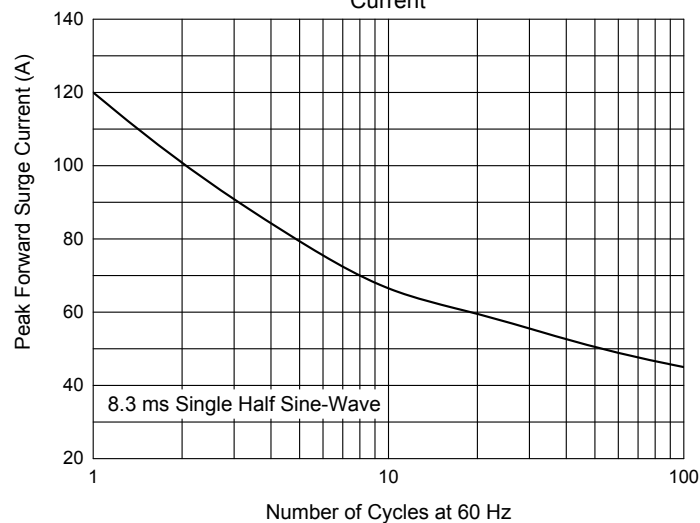


Fig. 3 - MBR10100FCTH Typical Instantaneous Forward Characteristics

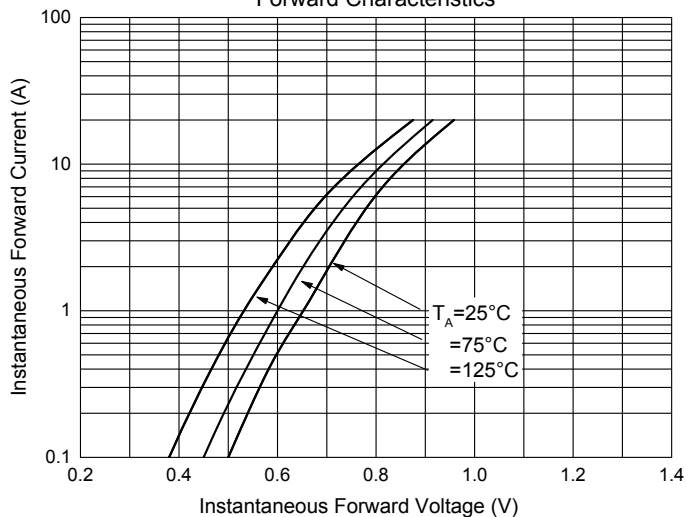


Fig. 4 - MBR10150FCTH Typical Instantaneous Forward Characteristics

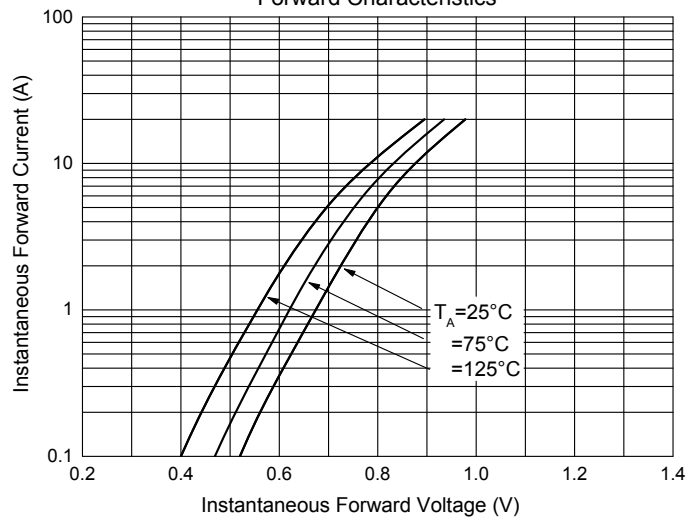


Fig. 5 - MBR10200FCTH Typical Instantaneous Forward Characteristics

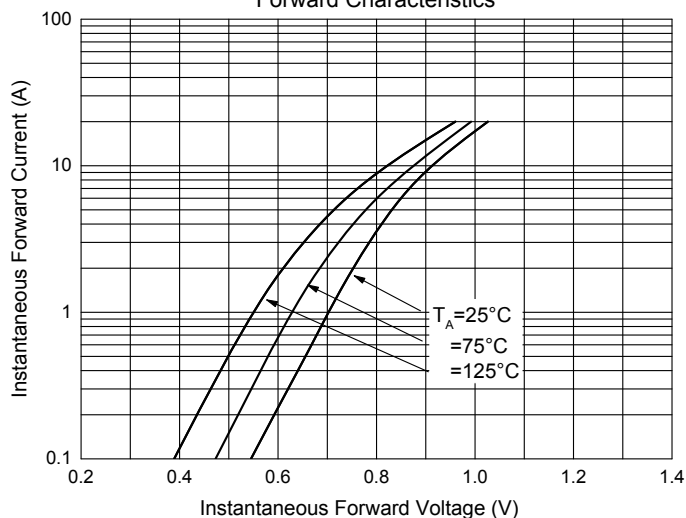
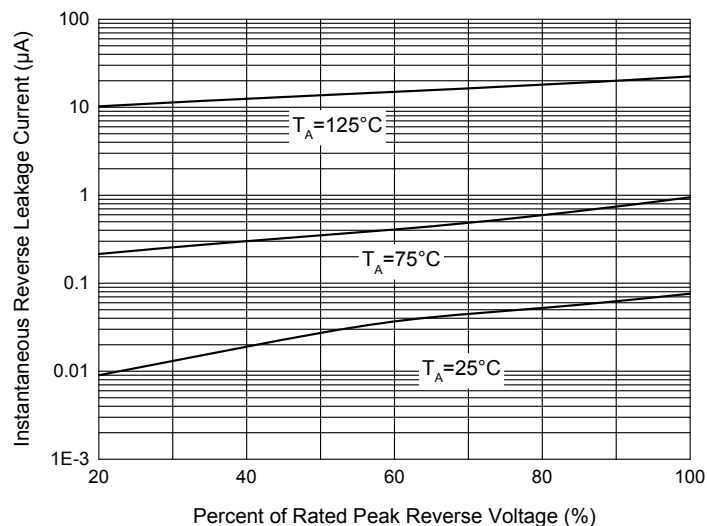


Fig. 6 - Typical Reverse Leakage Characteristics



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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