

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
- Moisture Sensitivity Level 1

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

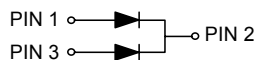
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR30100FCTH	MBR30100FCTH	100V	70V	100V
MBR30150FCTH	MBR30150FCTH	150V	105V	150V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	30A	$T_C=60^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	250A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	0.85V	$I_{FM}=15\text{A}$ $T_A=25^\circ\text{C}$
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	310pF 390pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

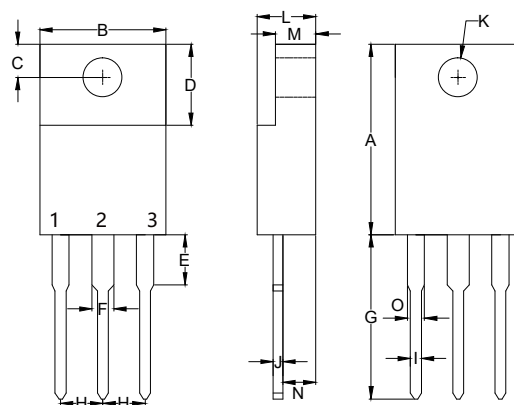
Note :1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

Internal Structure



30 Amp Schottky Barrier Rectifier 100 to 150 Volts

ITO-220AB



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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

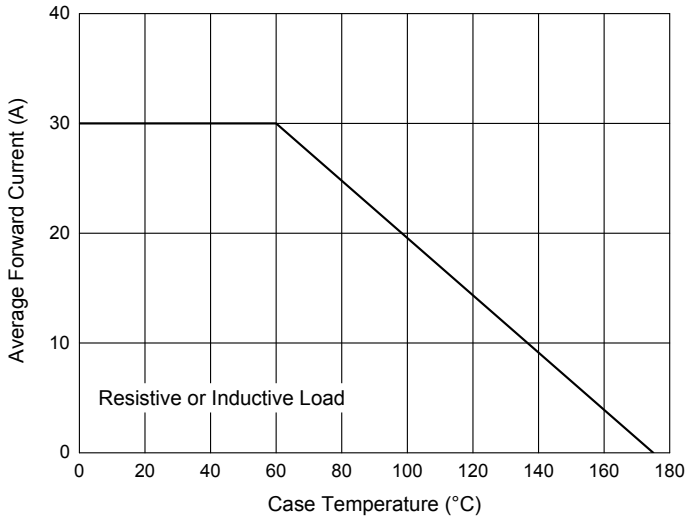


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

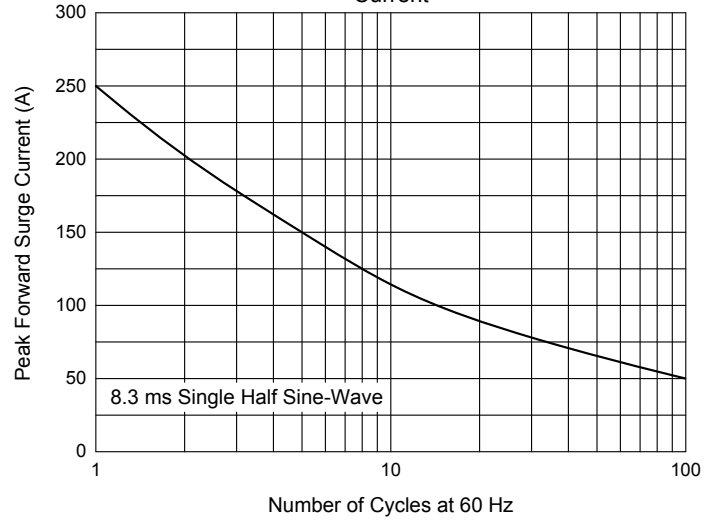


Fig. 3 - MBR30100FCTH Typical Instantaneous Forward Characteristics

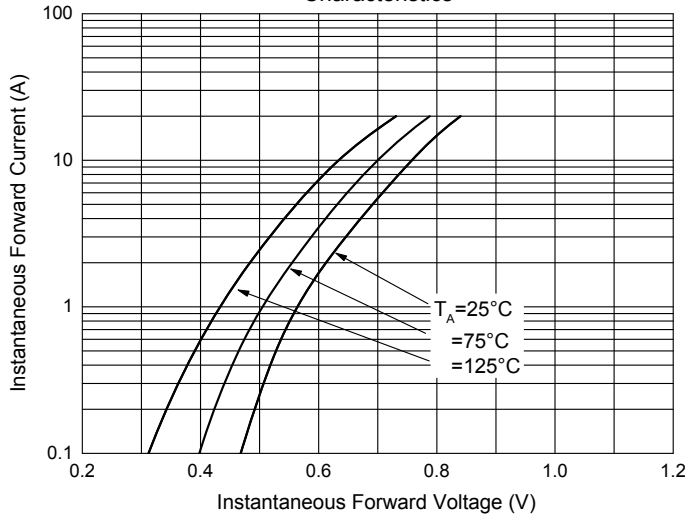


Fig. 4 - MBR30150FCTH Typical Instantaneous Forward Characteristics

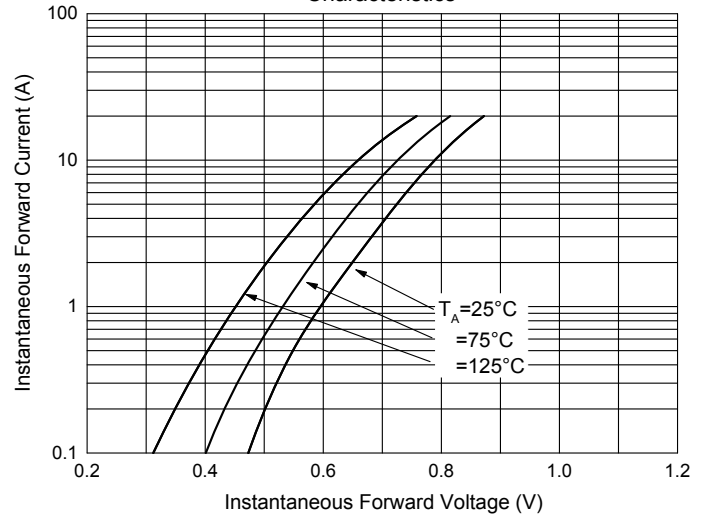


Fig. 5 - Typical Reverse Leakage Characteristics

