

Features

- High Frequency Operation
- High Current Capability and High Efficiency
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- High Junction Temperature Capability
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates RoHS 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
MBR20100FCTH	MBR20100FCTH	100V	70V	100V
MBR20150FCTH	MBR20150FCTH	150V	105V	150V
MBR20200FCTH	MBR20200FCTH	200V	140V	200V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	20A	$T_C=100^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	0.82V 0.85V 0.9V	$I_{FM}=10A$ $T_A=25^\circ\text{C}$
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	250pF 200pF 150pF	Measured at 1.0MHz, $V_R=4.0V$

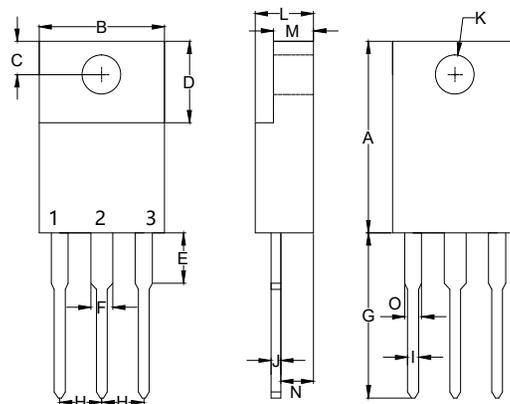
Note :1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

Internal Structure



**20 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

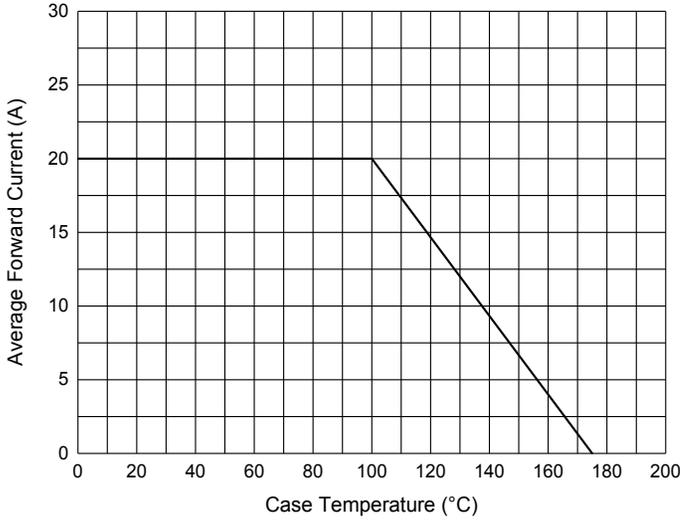


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

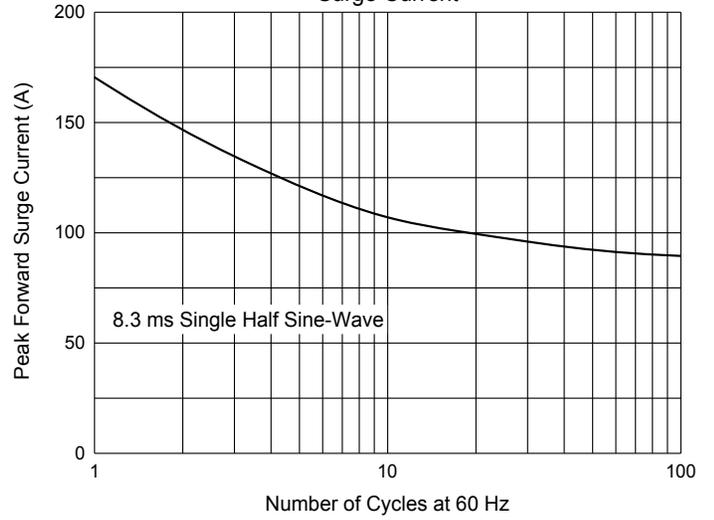


Fig. 3 - Typical Instantaneous Forward Characteristics

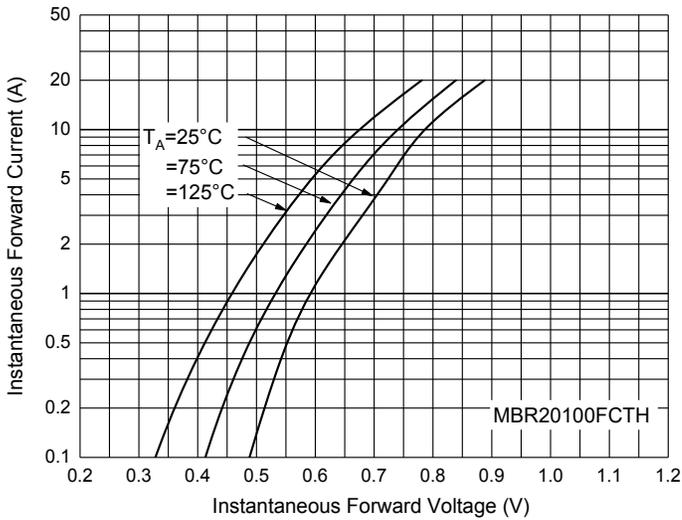


Fig. 4 - Typical Instantaneous Forward Characteristics

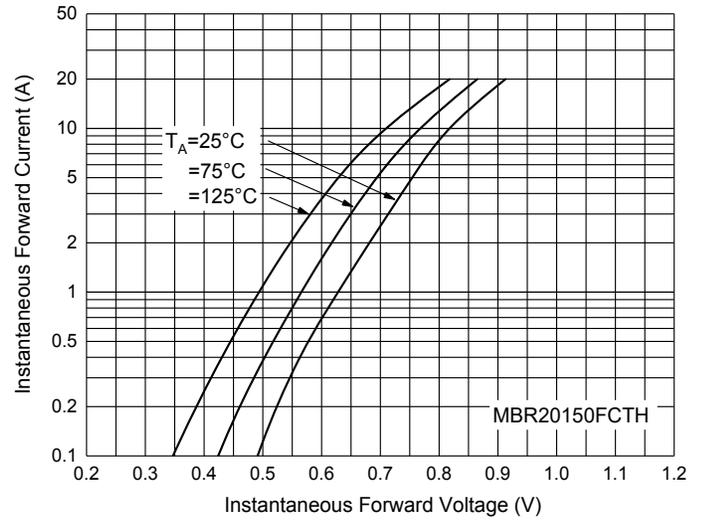


Fig. 5 - Typical Instantaneous Forward Characteristics

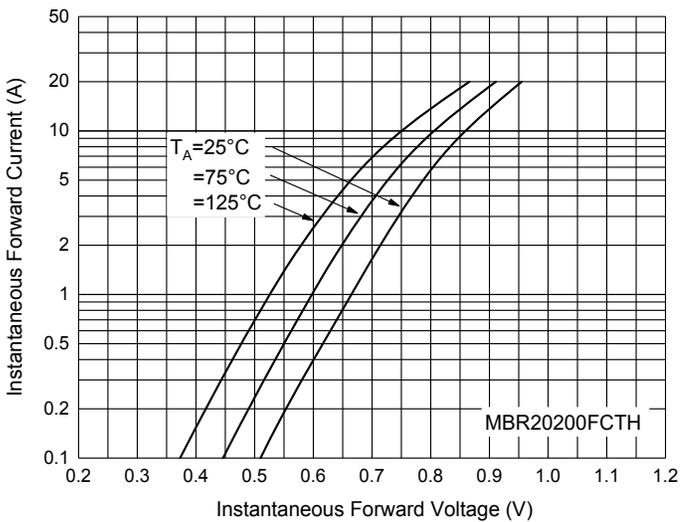
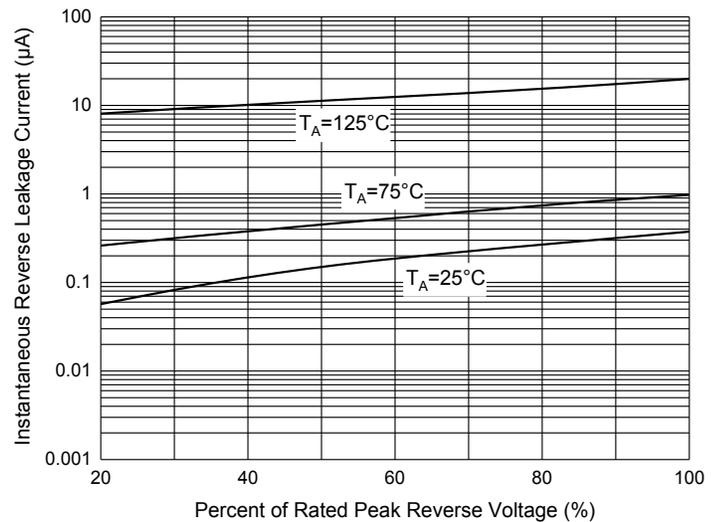


Fig. 6 - Typical Reverse Leakage Characteristics



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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