

**Features**

- High Surge Capability
- Low Power Loss and High Efficiency
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- 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: -50°C to +125°C
- Storage Temperature Range: -50°C to +125°C
- Maximum Thermal Resistance: 2.0°C/W Junction to Case

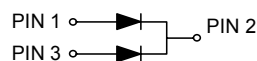
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR1620FCT	MBR1620FCT	20V	14V	20V
MBR1630FCT	MBR1630FCT	30V	21V	30V
MBR1640FCT	MBR1640FCT	40V	28V	40V
MBR1650FCT	MBR1650FCT	50V	35V	50V
MBR1660FCT	MBR1660FCT	60V	42V	60V
MBR1680FCT	MBR1680FCT	80V	56V	80V
MBR16100FCT	MBR16100FCT	100V	70V	100V

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

Average Forward Current	$I_{F(AV)}$	16A	$T_C=90^\circ C$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	0.55V	$I_{FM}=8.0A$ Per Leg
1620FCT-1640FCT		0.75V	
1650FCT-1660FCT 1680FCT-16100FCT		0.85V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.2mA	$T_J=25^\circ C$
		20mA	$T_J=100^\circ C$

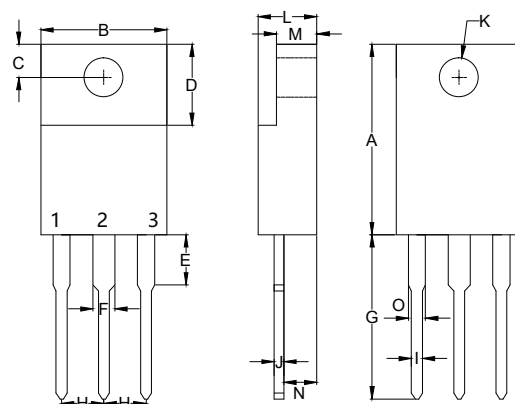
Note :1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

**Internal Structure**



**16 Amp  
Schottky Rectifier  
20 to 100 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

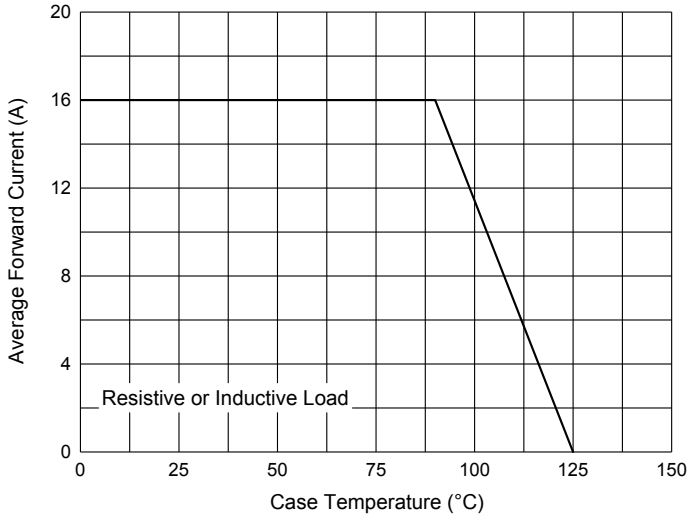


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

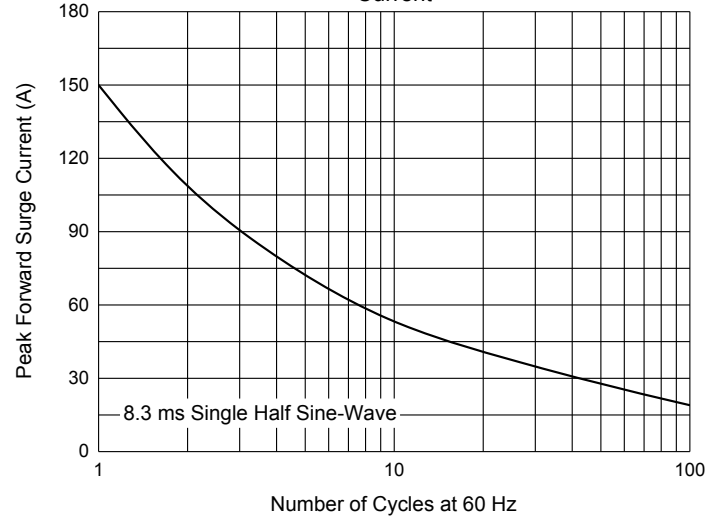


Fig. 3 - Typical Instantaneous Forward Characteristics

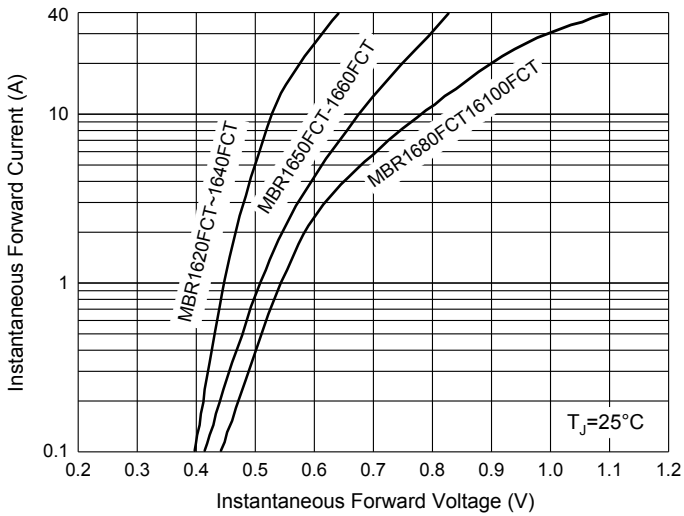


Fig. 4 - Typical Reverse Leakage Characteristics

