



**KERSEMI**

Micro Commercial Components  
 20736 Marilla Street Chatsworth  
 CA 91311  
 Phone: (818) 701-4933  
 Fax: (818) 701-4939

**MBR1620FCT  
 THRU  
 MBR16100FCT**

**16 Amp  
 Schottky Rectifier  
 20-100 Volts**

**Features**

- High Surge Capability
- Low Forward Voltage Drop
- Marking : type number
- Low Power Loss, High Efficiency
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0

**Maximum Ratings**

- Operating Temperature: -50°C to +125°C
- Storage Temperature: -50°C to +125°C
- Maximum Thermal Resistance:  $R_{\theta JC} = 2.0^{\circ}\text{C}/\text{W}$

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

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

Average Forward Current	$I_{F(AV)}$	16 A	$T_C = 90^{\circ}\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	.55V	$I_{FM} = 8.0\text{A per leg}$
MBR1620FCT-1640FCT		.75V	
MBR1650FCT-1660FCT MBR1680FCT-16100FCT		.85V	
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.5mA 100mA	$T_C = 25^{\circ}\text{C}$ $T_C = 100^{\circ}\text{C}$

**ITO-220AB**

**DIMENSIONS**

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.583	.606	14.80	15.40	
B	---	.406	---	10.30	
C	.100	.112	2.55	2.85	
D	.248	.272	6.30	6.90	
E	---	.161	---	4.10	
F	---	.071	---	1.80	
G	.512	.543	13.00	13.80	
H	.100		2.55		
I	---	.035	---	0.90	
J	---	.032	---	0.80	
K	.118	.134	3.00	3.40	∅
L	---	.189	---	4.80	
M	---	.130	---	3.30	
N	.098	.114	2.50	2.90	
O	---	.055	---	1.40	



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# MBR1620FCT thru MBR16100FCT

Figure 1  
Typical Reverse Characteristics

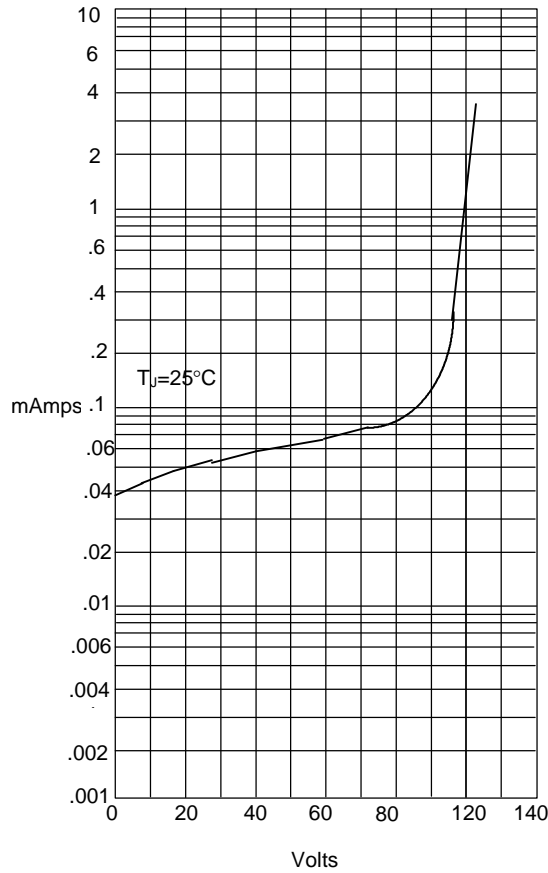
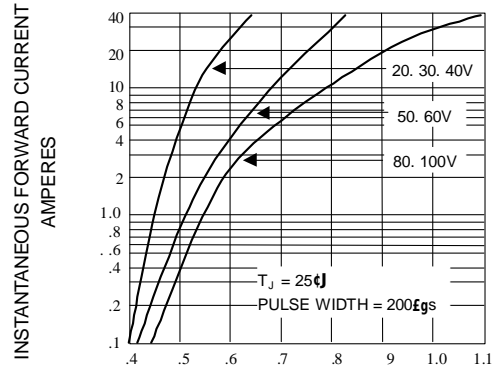


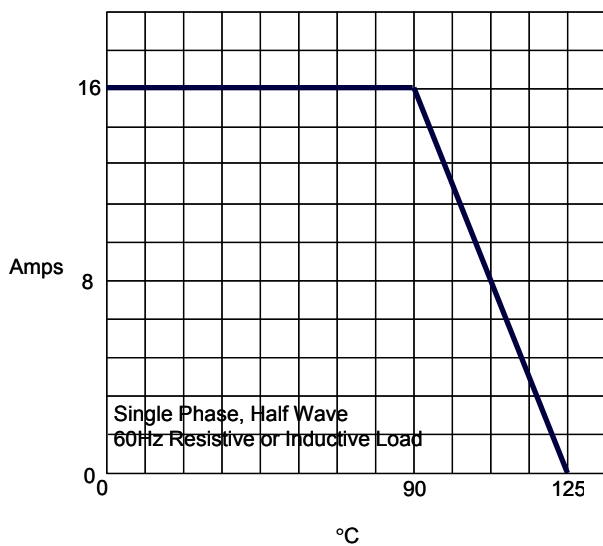
Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC



INSTANTANEOUS FORWARD CHARACTERISTIC

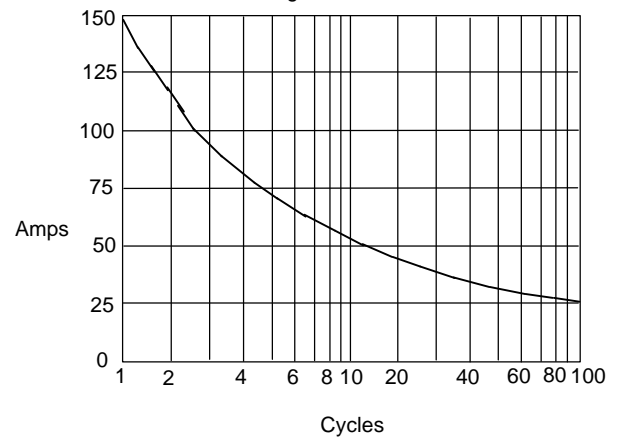
Instantaneous Reverse Leakage Current - MicroAmperes versus Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus Ambient Temperature - °C

Figure 4  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus Number Of Cycles At 60Hz - Cycles