

## Features

- High Surge Capacity
- High Current Capability 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: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance : 4°C/W Junction to Case

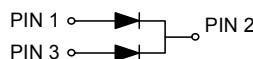
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR2020FCT	MBR2020FCT	20V	14V	20V
MBR2030FCT	MBR2030FCT	30V	21V	30V
MBR2035FCT	MBR2035FCT	35V	24.5V	35V
MBR2040FCT	MBR2040FCT	40V	28V	40V
MBR2045FCT	MBR2045FCT	45V	31.5V	45V
MBR2060FCT	MBR2060FCT	60V	42V	60V
MBR2080FCT	MBR2080FCT	80V	56V	80V
MBR20100FCT	MBR20100FCT	100V	70V	100V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	20A	$T_A=120^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage			
2020FCT-2045FCT	$V_F$	0.70V	$I_{FM}=10\text{A}$
2060FCT		0.80V	$T_J=25^\circ\text{C}$
2080FCT-20100FCT		0.85V	
2020FCT-2045FCT		0.84V	$I_{FM}=20\text{A}$
2060FCT		0.95V	$T_J=25^\circ\text{C}$
2080FCT-20100FCT		0.95V	
2020FCT-2045FCT		0.72V	$I_{FM}=20\text{A}$
2060FCT		0.85V	$T_J=125^\circ\text{C}$
2080FCT-20100FCT		0.85V	
Maximum DC Reverse Current at Rated DC Blocking Voltage			
2020FCT-2045FCT	$I_R$	0.1mA	$T_J=25^\circ\text{C}$
2060FCT-20100FCT		0.05mA	
2020FCT-2045FCT		20mA	$T_J=125^\circ\text{C}$
2060FCT-20100FCT		10mA	

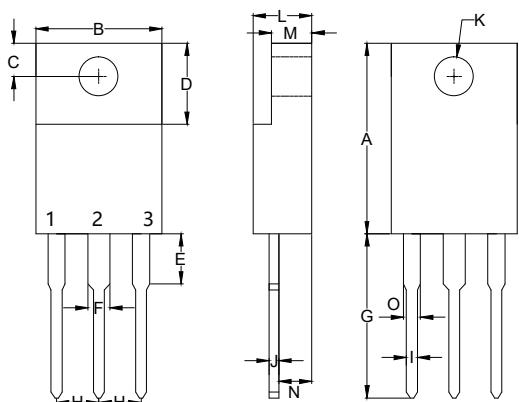
Note :1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

## Internal Structure



# 20 Amp Schottky Barrier 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

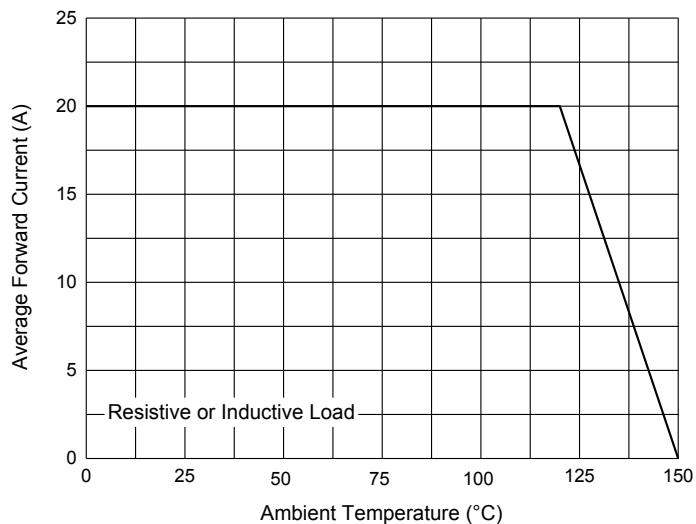


Fig. 3 - Typical Instantaneous Forward Characteristics

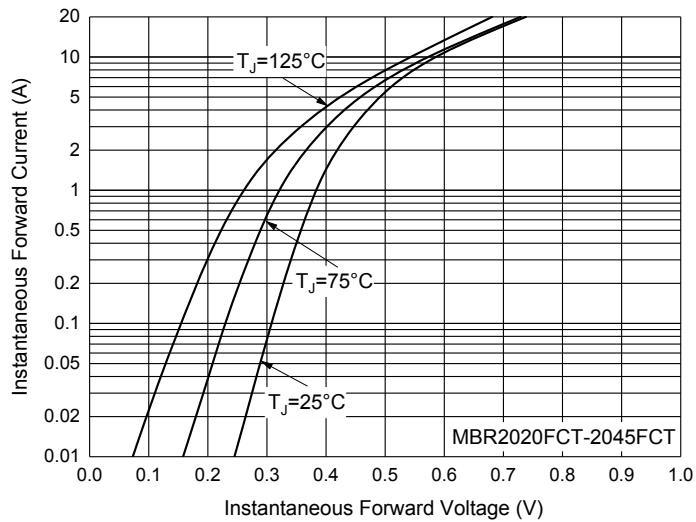


Fig. 5 - Typical Instantaneous Forward Characteristics

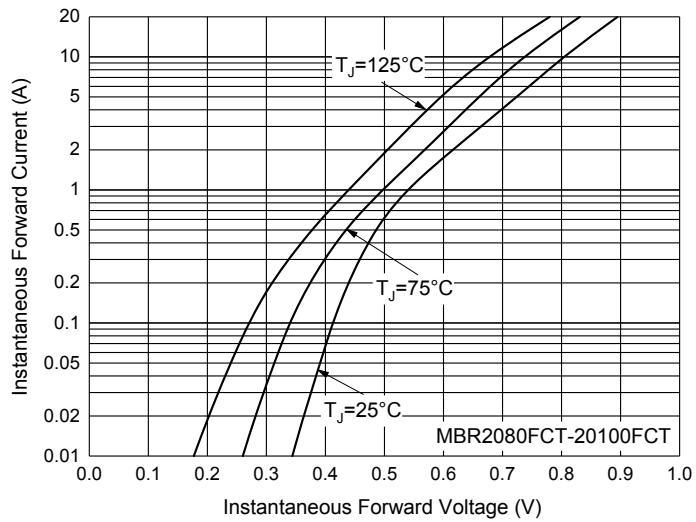


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

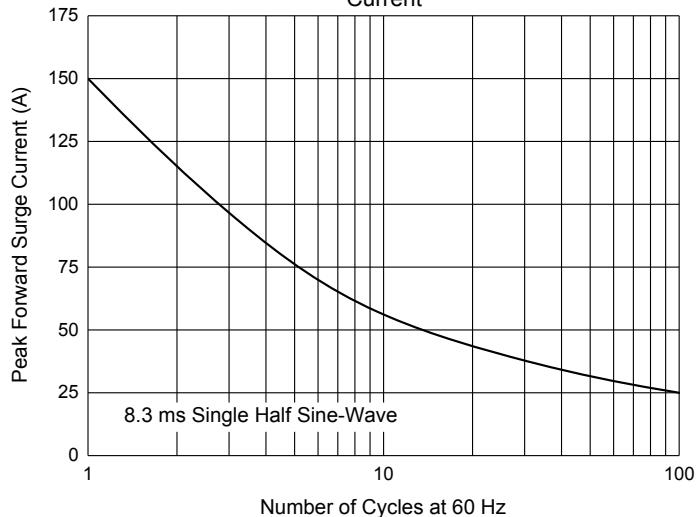


Fig. 4 - Typical Instantaneous Forward Characteristics

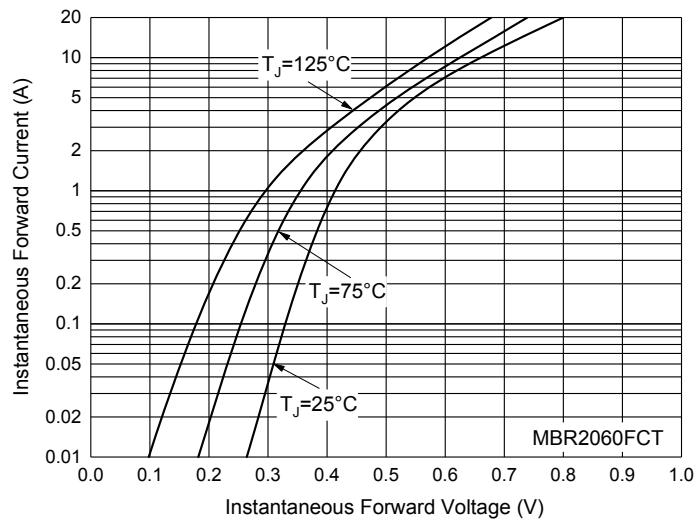
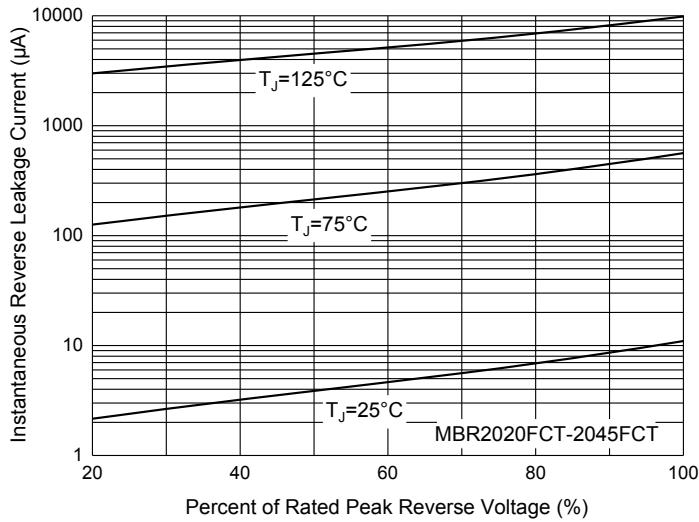


Fig. 6 - Typical Reverse Leakage Characteristics



## Curve Characteristics

Fig. 7 - Typical Reverse Leakage Characteristics

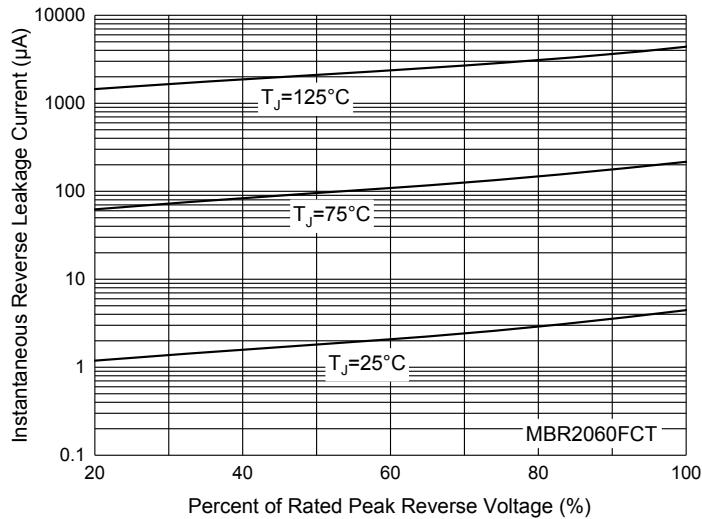
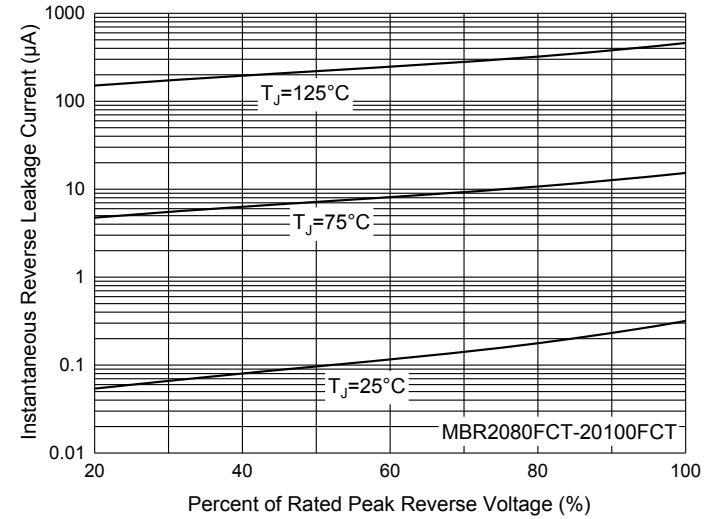


Fig. 8 - Typical Reverse Leakage Characteristics



## 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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