



# Direct Channel Worldwide Corp.

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## Features

- Low Power Loss
- High Efficiency
- Low Forward Voltage , High Current Capability
- High surge capacity
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0

## Maximum Ratings

- Operating Junction Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C

Item Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR1020FCT	MBR1020FCT	20V	14V	20V
MBR1030FCT	MBR1030FCT	30V	21V	30V
MBR1040FCT	MBR1040FCT	40V	28V	40V
MBR1045FCT	MBR1045FCT	45V	31.5V	45V
MBR1050FCT	MBR1050FCT	50V	35V	50V
MBR1060FCT	MBR1060FCT	60V	42V	60V
MBR1080FCT	MBR1080FCT	80V	56V	80V
MBR1090FCT	MBR1090FCT	90V	63V	90V
MBR10100FCT	MBR10100FCT	100V	70V	100V

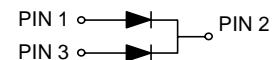
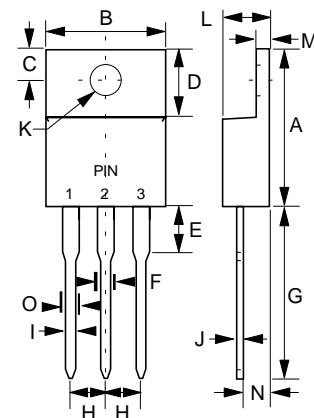
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10 A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	120A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 1020FCT-1045FCT 1050FCT-1060FCT 1080FCT-10100FCT	$V_F$	.55V .75V .85V	$T_J = 25^\circ\text{C}$ $I_{FM} = 5A;$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.1mA 50mA	$T_C = 25^\circ\text{C}$ $T_C = 100^\circ\text{C}$

# MBR1020FCT THRU MBR10100FCT

## 10 Amp Schottky Barrier Rectifier 20 to 100 Volts

### ITO-220AB



DIM	DIMENSIONS				NOTE
	INCHES		MM		
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	

Direct Channel Worldwide Corp.

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### MBR1020FCT thru MBR10100FCT

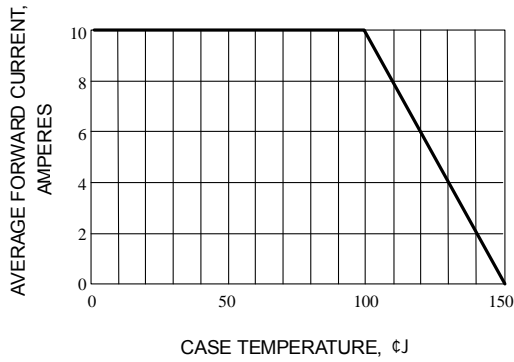


Fig. 1-FORWARD CURRENT DERATING CURVE

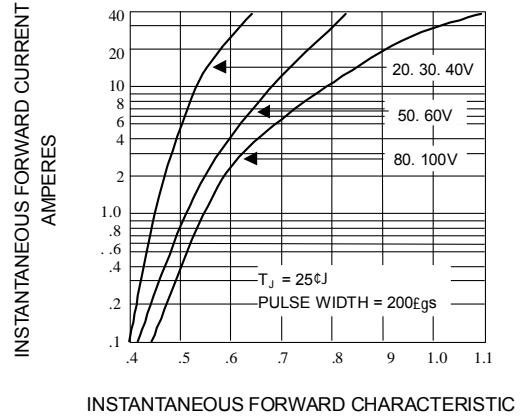


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

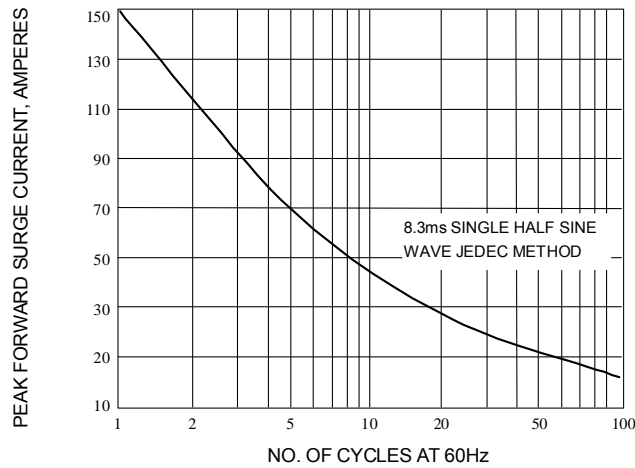


Fig. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT