



Micro Commercial Components  
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# MBRB820 THRU MBRB8100

## Features

- Low Power Loss
- High Efficiency
- Low Leakage Current
- High Current Capability
- High Surge Capacity

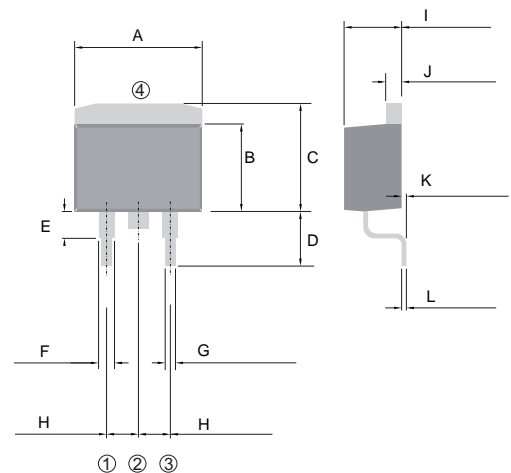
**8.0 Amp  
Schottky  
Barrier Rectifier  
20 to 100 Volts**

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRB820	20V	14V	20V
MBRB830	30V	21V	30V
MBRB840	40V	28V	40V
MBRB850	50V	35V	50V
MBRB860	60V	42V	60V
MBRB880	80V	56V	80V
MBRB8100	100V	70V	100V

## D<sup>2</sup>PAK



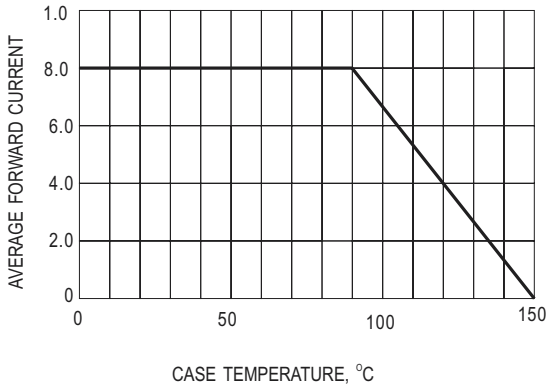
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	8A	$T_A = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage MBRB820-40 MBRB850-60 MBRB880-100	$V_F$	.55V .75V .85V	$I_{FM} = 8A;$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.5mA 50mA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$

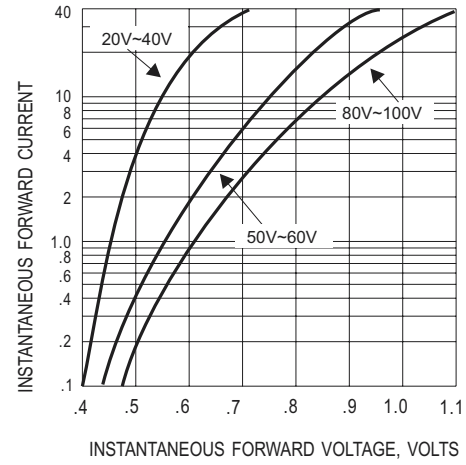
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.387	.409	9.8	10.4	
B	.335	.357	8.5	9.1	
C	.378	.418	9.6	10.6	
D	.197	.236	5.0	6.0	
E	.700		1.8		
F	.039	.055	1.0	1.4	
G	---	.035	---	0.9	
H	.092	.108	2.35	2.75	
I	.137	.189	4.4	4.8	
J	.047	.055	1.2	1.4	
K	-0.012	+0.012	-0.3	+0.3	
L	.011	.026	0.3	0.7	

\*Pulse Test: Pulse Width 200µsec, Duty Cycle 1%

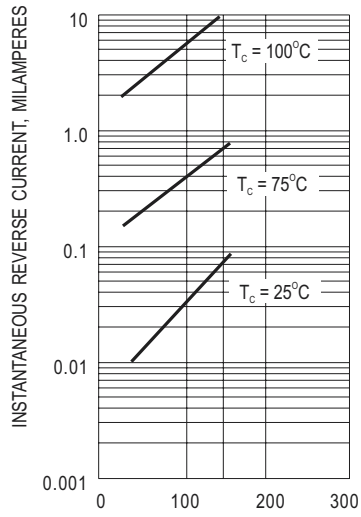
**RATING AND CHARACTERISTIC CURVES**  
**MBRB820 thru MBRB8100**



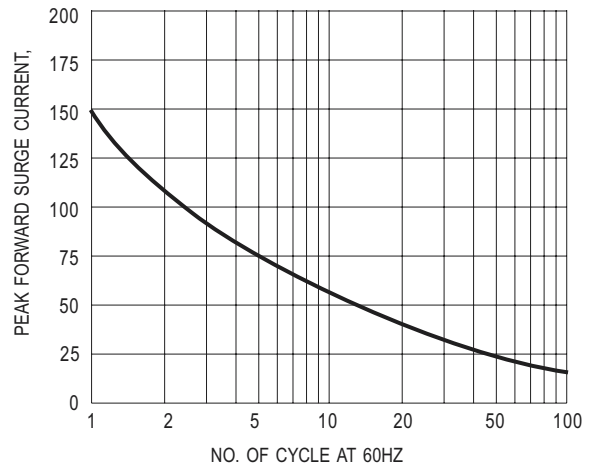
**Fig.1- FORWARD CURRENT DERATING CURVE**



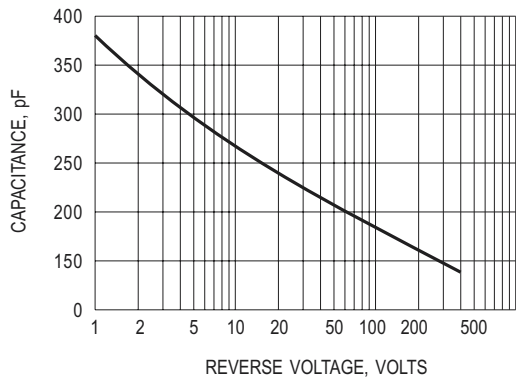
**Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC**



**Fig.3- TYPICAL REVERSE CHARACTERISTIC**



**Fig.4- MAXIMUM NON-REPETITIVE SURGE CURRENT**



**Fig.5- TYPICAL JUNCTION CAPACITANCE**