



Micro Commercial Components



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# MBRB820 THRU MBRB8100

## 8.0 Amp Schottky Barrier Rectifier 20 to 100 Volts

### Features

- High Efficiency, Low Power Loss
- Low Leakage Current
- High Current Capability
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Marking : type number

### Maximum Ratings

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Operating Temperature: -55°C to +150 °C
- Storage Temperature: - 55°C to +150°C

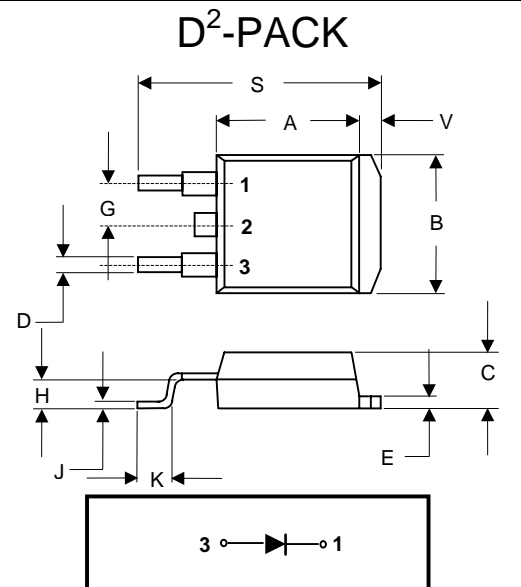
MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRB820	20V	14V	20V
MBRB830	30V	21V	30V
MBRB840	40V	28V	40V
MBRB850	50V	35V	50V
MBRB860	60V	42V	60V
MBRB880	80V	56V	80V
MBRB8100	100V	70V	100V

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

Average Forward Current	$I_{F(AV)}$	8A	$T_C = 100^\circ\text{C}$
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	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$

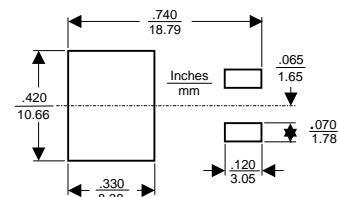
\*Pulse Test: Pulse Width 200µsec, Duty Cycle 1%

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

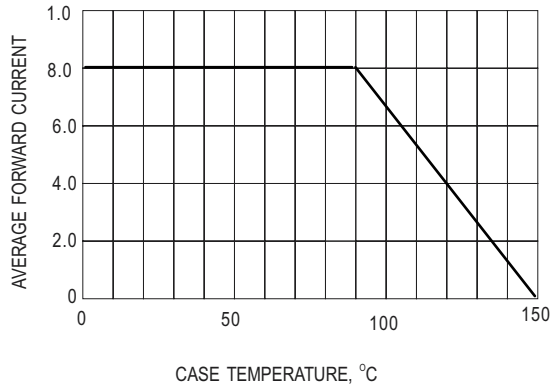


DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.320	.359	8.13	9.14	
B	.380	.411	9.65	10.45	
C	.160	.190	4.06	4.83	
D	.020	.035	0.51	0.89	
E	.045	.055	1.14	1.40	
G	.095	.105	2.41	2.67	
H	.096	.120	2.43	3.03	
J	.014	.021	0.35	0.53	
K	.090	.110	2.29	2.79	
S	.575	.625	14.60	15.80	
V	.045	.055	1.14	1.40	

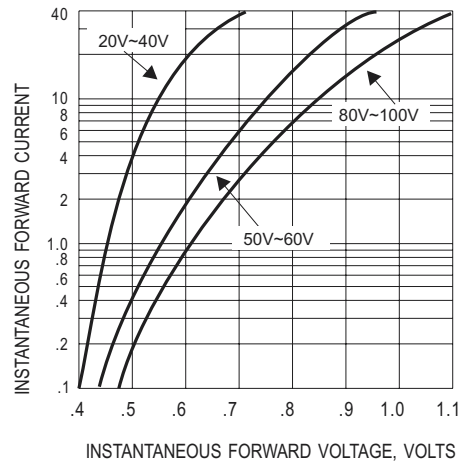
### SUGGESTED SOLDER PAD LAYOUT



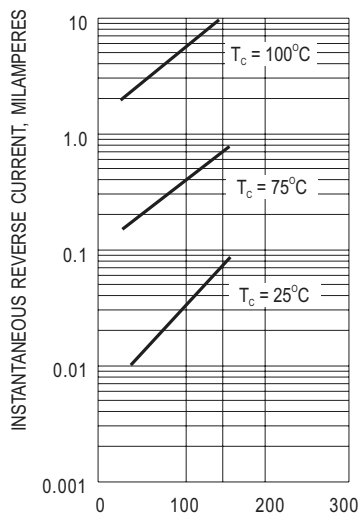
**RATING AND CHARACTERISTIC CURVES**  
**MBRB820 thru MBRB8100**



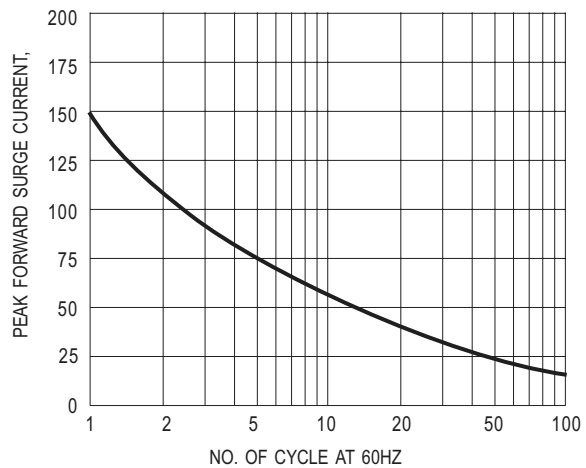
**Fig.1- FORWARD CURRENT DERATING CURVE**



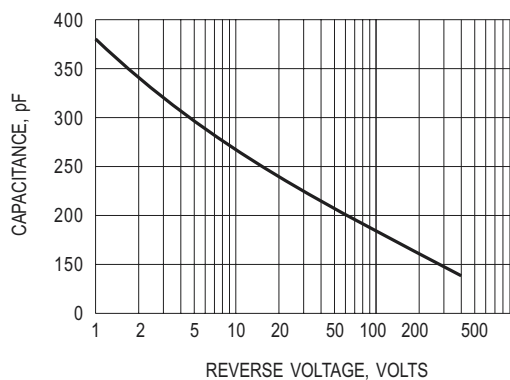
**Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC**



**Fig.3- TYPICAL REVERSE CHARACTERISTIC**



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



**Fig.5- TYPICAL JUNCTION CAPACITANCE**



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Ordering Information :

Device	Packing
Part Number-BP	Tube: 1Kpcs/Box

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