

## Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- High Current Capability, High Efficiency.
- 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 Per Leg: 2 °C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRB1535	MBRB1535	35V	24.5V	35V
MBRB1545	MBRB1545	45V	31.5V	45V

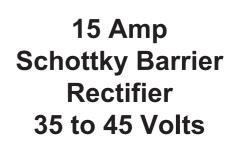
## Electrical Characteristics @ 25°C Unless Otherwise Specified

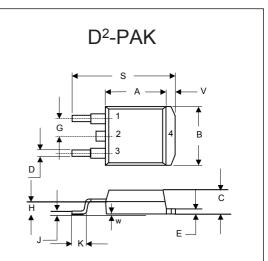
Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% Duty Cycle	I <sub>F(AV)</sub>	15A	T <sub>C</sub> =120⁰C
Peak Forward Surge Current	I <sub>FSM</sub>	250A	8.3ms,Half Sine Wave
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.49V(typ.) 0.52V(max) 0.47V(max)	I <sub>F</sub> =15A TJ=25⁰C TJ=125⁰C
Maximum Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.15mA 5mA	Tյ=25⁰C Tյ=75⁰C

Note:1. High Temperature Solder Exemptions Applied, See EU Directive Annex Notes 7a.

## **Internal Structure**

O PIN 4





	DIMENSIONS						
DIM	INCHES		MM		NOTE		
	MIN	MAX	MIN	MAX	NOTE		
Α	0.331	0.370	8.40	9.40			
В	0.378	0.417	9.60	10.60			
С	0.165	0.189	4.20	4.80			
D	0.027	0.037	0.68	0.94			
E	0.045	0.055	1.14	1.40			
G	0.010		2.54		TYP.		
Н	0.096	0.134	2.43	3.40			
J	0.011	0.025	0.28	0.64			
K	0.071	0.131	1.80	3.32			
S	0.575	0.625	14.60	15.87			
V	0.042	0.058	1.07	1.47			
W	0.000	0.010	0.00	0.25			

# Suggested Solder Pad Layout $\begin{array}{c} & \underline{638} \\ 16.20 \\ & \underline{16.20} \\ 1.65 \\ 1.65 \\ & \underline{1.38} \\ & \underline{1.38}$



# **Curve Characteristics**

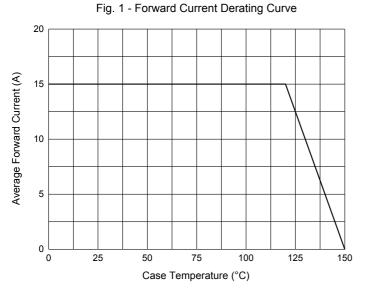
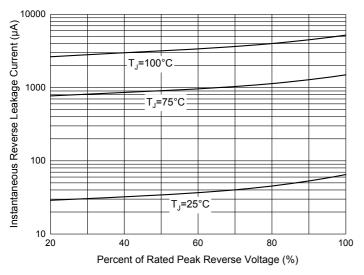
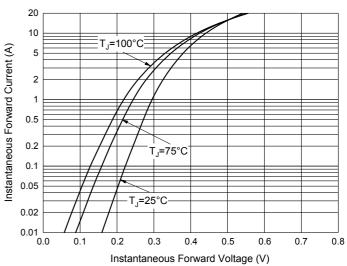


Fig. 3 - Typical Reverse Leakage Characteristics







# **Ordering Information**

Device	Packing		
Part Number-TP	Tape&Reel: 800pcs/Reel		
Part Number-BP	Tube: 5Kpcs/Ctn		

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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