

Features

- Multilayer Metal -Silicon Potential Structure
- Guardring for Over Voltage Protection
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 0.5 °C/WJunction to Case

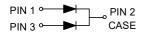
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR4045PT	MBR4045PT	45V	31.5V	45V

Electrical Characteristics @ 25°C Unless Otherwise Specified

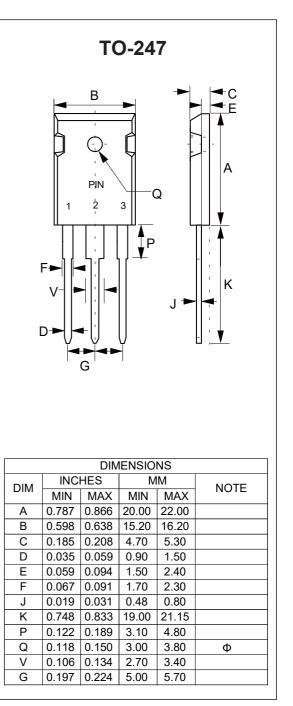
Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% Duty Cycle	I _{F(AV)}	40A	T _C =110⁰C
Peak Forward Surge Current	I _{FSM}	250A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V _F	0.56V(Typ) 0.61V(Max) 0.51V(Max)	I _F =20A; T _J =25⁰C I _F =20A; T _J =25⁰C I _F =20A; T _J =125⁰C
Maximum Reverse Current at Rated DC Blocking Voltage	I _R	0.1mA 15mA	Tյ=25⁰C Tյ=125⁰C

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

Internal Structure









Curve Characteristics

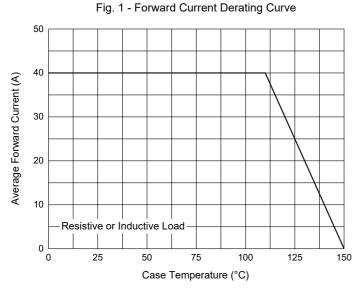
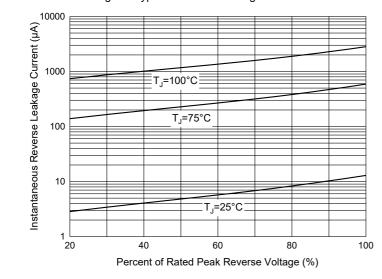


Fig. 3 - Typical Reverse Leakage Characteristics



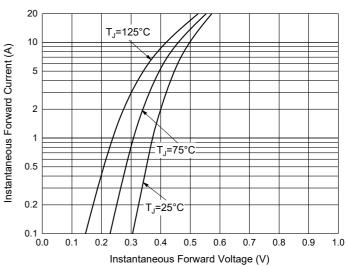


Fig. 2 - Typical Instantaneous Forward Characteristics



Ordering Information

Device	Packing	
Part Number-BP	Tube:30pcs/Tube, 360pcs/Box,1.8K/Ctn;	

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

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