

# Features

- 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/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR4060PT	MBR4060PT	60V	42V	60V

# Electrical Characteristics @ 25°C Unless Otherwise Specified

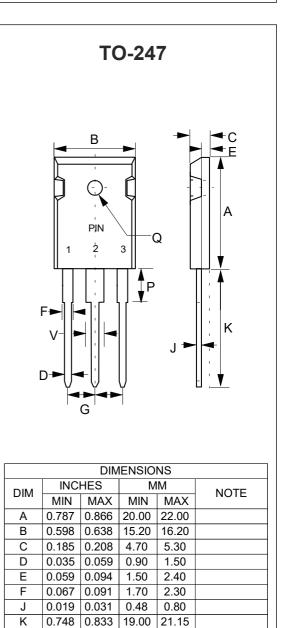
Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% Duty Cycle	I <sub>F(AV)</sub>	40A	T <sub>C</sub> =110⁰C
Peak Forward Surge Current	I <sub>FSM</sub>	400A	8.3ms,half sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.69V(Typ) 0.72V(Max) 0.65V(Max)	I <sub>F</sub> =20A; T <sub>J</sub> =25°C I <sub>F</sub> =20A; T <sub>J</sub> =25°C I <sub>F</sub> =20A; T <sub>J</sub> =125°C
Maximum Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.2mA 10mA	Tյ=25⁰C Tյ=100⁰C

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

## Internal Structure:

PIN 1 •		PIN 2
PIN 3 •	┣	CASE

# 40 Amp Schottky Barrier Rectifier 60 Volts



0.122

0.197

0.189

0.224

0.118 0.150

0.106 0.134

3.10

3.00

2.70

5.00

4.80

3.80

3.40

5.70

Φ

Ρ

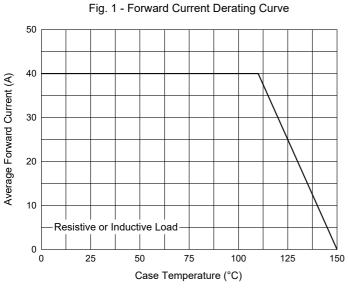
Q

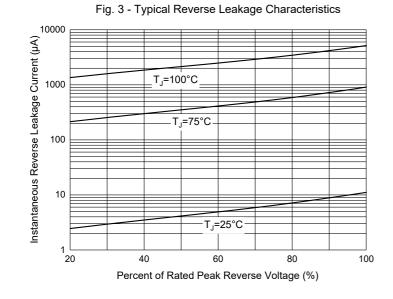
V

G



# **Curve Characteristics**





20 T\_=125°C 10 Instantaneous Forward Current (A) 5 2 1 \_T\_=75°C 0.5 0.2 T\_=25°C 0.1 0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 Instantaneous Forward Voltage (V)

Fig. 2 - Typical Instantaneous Forward Characteristics

#### Rev.3-2-12012020



# **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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