

## **Features**

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Low Leakage Current.
- · High Current Capability, High Efficiency.
- High Junction Temperature Capability.
- Epoxy Meets UL 94 V-0 Flammability Rating

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C
- Typical Thermal Resistance: 0.5°C/W Junction to Case

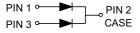
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR30100PT	MBR30100PT	100V	70V	100V

# Electrical Characteristics @ 25°C Unless Otherwise Specified

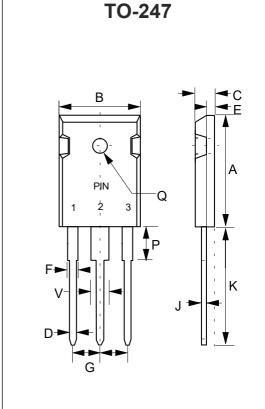
Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% Duty Cycle	I <sub>F(AV)</sub>	30A	
Peak Forward Surge Current	I <sub>FSM</sub>	300A	8.3ms,Half Sine Wave
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.77V(Typ) 0.80V(Max) 0.72V(Max)	I <sub>F</sub> =15A; T <sub>J</sub> =25°C I <sub>F</sub> =15A; T <sub>J</sub> =25°C I <sub>F</sub> =15A; T <sub>J</sub> =125°C
Maximum Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.05mA 3.0mA	T <sub>J</sub> =25°C T <sub>J</sub> =125°C

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

#### **Internal Structure**



# 30 Amp Schottky **Barrier Rectifier** 100 Volts



DIMENSIONS							
DIM	INCHES		MM		NOTE		
	MIN	MAX	MIN	MAX	NOTE		
Α	0.787	0.866	20.00	22.00			
В	0.598	0.638	15.20	16.20			
С	0.185	0.208	4.70	5.30			
D	0.035	0.059	0.90	1.50			
Ε	0.059	0.094	1.50	2.40			
F	0.067	0.091	1.70	2.30			
J	0.019	0.031	0.48	0.80			
K	0.748	0.833	19.00	21.15			
Р	0.122	0.189	3.10	4.80			
Q	0.118	0.150	3.00	3.80	Ф		
V	0.106	0.134	2.70	3.40			
G	0.197	0.224	5.00	5.70			



# **Curve Characteristics**

Fig. 1 - Typical Instantaneous Forward Characteristics

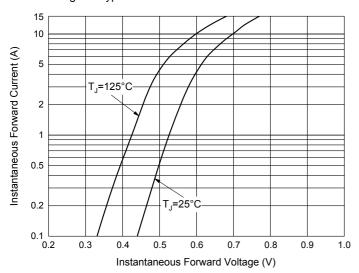
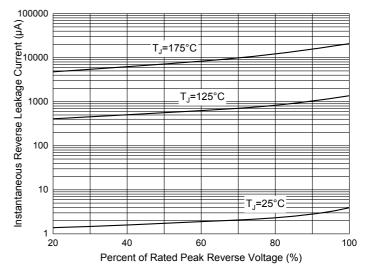


Fig. 2 - Typical Reverse Leakage Characteristics





## **Ordering Information**

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

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