

#### **Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Multilayer Metal -Silicon Potential Structure.
- Low Power Loss, High Efficiency
- · High Surge Capacity and High Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- High Junction Temperature Capability

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C
- Typical Thermal Resistance: 1°C/W Junction to Case

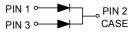
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR30200PTS	MBR30200PTS	200V	140V	200V

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

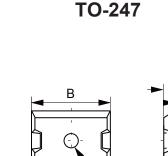
Average Forward Current	I <sub>F(AV)</sub>	30A	T <sub>C</sub> =125°C
Peak Forward Surge Current	I <sub>FSM</sub>	250A	8.3ms,Half Sine Wave
Instantaneous Forward Voltage	V <sub>F</sub>	0.90V(Max) 0.83V(Typ) 0.74V(Typ)	$I_{FM}$ =15A; $T_{J}$ =25°C $I_{FM}$ =15A; $T_{J}$ =125°C
Maximum Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	10uA 10mA	T <sub>J</sub> =25°C T <sub>J</sub> =125°C
Typical Junction Capacitance	CJ	240pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

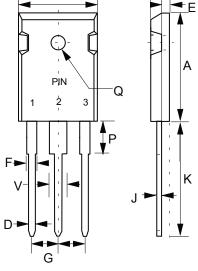
Note:1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7a.

#### **Internal Structure:**



# 30 Amp Schottky Barrier Rectifier 200 Volts





DIMENSIONS							
DIM	INCHES		MM		NOTE		
DIIVI	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			
E	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**

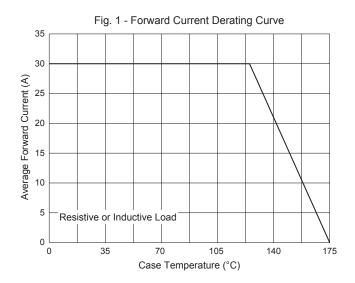


Fig. 3 - Typical Instantaneous Forward Characteristics

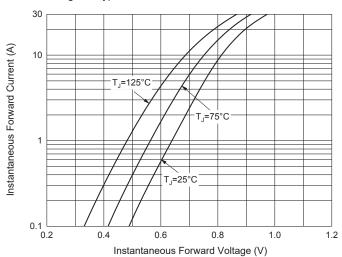
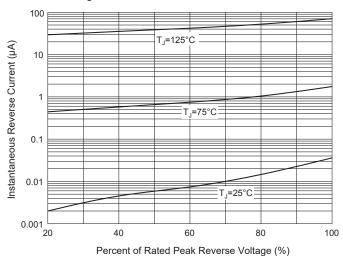


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

250
250
150
150
8.3 ms Single Half Sine-Wave
0
1 10 100
Number of Cycles at 60 Hz

Fig. 4 - Instantaneous Reverse Characteristics





## **Ordering Information**

Device	Packing	
MBR30200PTS-BP	Tube:30pcs/Tube, 360pcs/Box,1.8K/Ctn;	

Note: Adding "-HF" Suffix For Halogen Free, eg. MBR30200PT-BP-HF

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