

### **Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Low Leakage Current
- High Current Capability, High Efficiency
- High Junction Temperature Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)

# **Maximum Ratings**

• Operating Junction Temperature Range: -55°C to +175°C

• Storage Temperature Range: -55°C to +175°C

• Thermal Resistance: 2°C/W Junction to Case

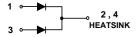
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRB10200CTS	MBRB10200CTS	200V	140V	200V

# Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	10A	T <sub>c</sub> =150°C	
Peak Forward Surge Current	I <sub>FSM</sub>	120A	8.3ms,Half Sine	
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.93V	I <sub>FM</sub> =5.0A; T <sub>J</sub> =25°C	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	10µA 2mA	Tյ=25°C Tյ=125°C	

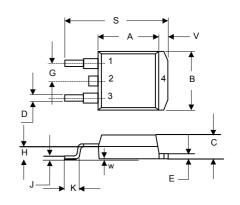
Note:1. High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 7a.

# **Internal Structure**



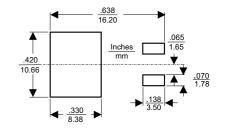
# 10 Amp High Voltage Power Schottky Barrier Rectifier 200 Volts

# D<sup>2</sup>-PAK



	DIMENSIONS					
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOIL	
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**





# **Curve Characteristics**

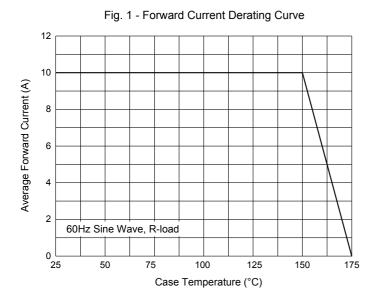


Fig. 3 - Typical Instantaneous Forward Characteristics

20
10
T<sub>J</sub>=125°C
T<sub>J</sub>=75°C

0.1
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1

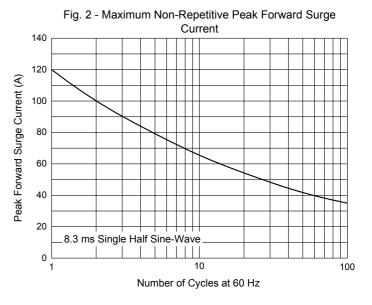
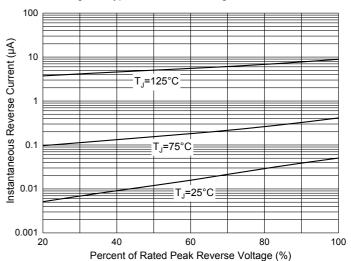


Fig. 4 - Typical Reverse Leakage Characteristics





# **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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