

### **Features**

- Halogen Free. "Green" Device (Note 1)
- High Efficiency
- Lead Free Finish/RoHS Compliant(Note 2) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 3°C/W Junction to Case

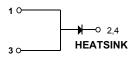
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURB10120C	1200V	840V	1200V

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

Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% duty cycle	I <sub>F(AV)</sub>	10A	T <sub>C</sub> =110°C
Peak Forward Surge Current	I <sub>FSM</sub>	110A	8.3ms,Half Sine Wave
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.9V(typ.) 2.4V(max) 2.0V(max)	$I_F=10A; T_J=25^{\circ}C$ $I_F=10A; T_J=25^{\circ}C$ $I_F=10A; T_J=125^{\circ}C$
Maximum Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	0.01mA 1.0mA	T <sub>J</sub> =25°C; T <sub>J</sub> =125°C
Maximum Reverse Recovery Time	t <sub>rr</sub>	75ns	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; I <sub>RR</sub> =0.25A

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

### **Internal Structure**

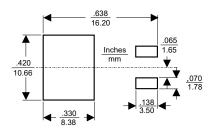


# 10 Amp Super Fast Recovery Rectifier 1200 Volts

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

DIMENSIONS					
DIM	INCHES		MM		NOTE
וווט	MIN	MAX	MIN	MAX	NOTE
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	
Е	0.045	0.055	1.14	1.40	
G	0.010		2.54		TYP.
Ι	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	
٧	0.042	0.058	1.07	1.47	
W	0.000	0.010	0.00	0.25	

### Suggested Solder Pad Layout



<sup>2.</sup> High temperature solder exemption applied, see EU directive annex 7a.



## **Curve Characteristics**

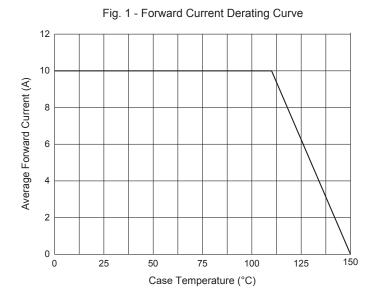


Fig. 3 - Typical Instantaneous Forward Characteristics

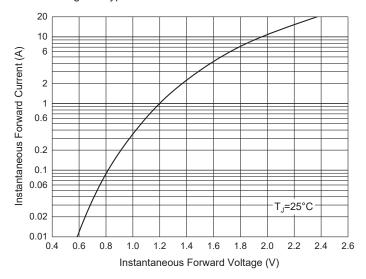
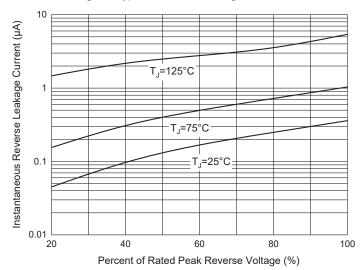


Fig. 2 - Typical Reverse Leakage Characteristics





### **Ordering Information**

Device	Packing	
Part Number-TP	Tape&Reel: 800pcs/Reel	
Part Number-BP	Tube: 1Kpcs/Box	

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