

### **Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- · High Forward Surge Current Capability
- Low Reverse Leakage
- Lead Free Finish/RoHS Compliant(Note 1) ("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 +175°C
- Storage Temperature Range: -55°C to +175°C
- Typical Thermal Resistance: 2°C/W Junction to Case

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURSB1260	600V	420V	600V

# Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% Duty Cycle	I <sub>F(AV)</sub>	12A	T <sub>C</sub> =120°C
Peak Forward Surge Current	I <sub>FSM</sub>	110A	8.3ms,Half Sine Wave
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	2.00V(Typ) 2.45V(Max) 2.10V(Max)	I <sub>F</sub> =12A;T <sub>J</sub> =25°C I <sub>F</sub> =12A;T <sub>J</sub> =25°C I <sub>F</sub> =12A;T <sub>J</sub> =125°C
Maximum Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	0.01mA 0.1mA	T <sub>J</sub> =25°C; T <sub>J</sub> =125°C
Maximum Reverse Recovery Time	t <sub>rr</sub>	25ns	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; I <sub>RR</sub> =0.25A

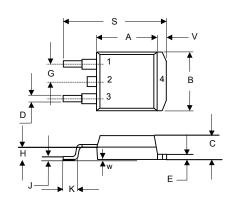
Note:1. High Temperature Solder Exemptions Applied, See EU Directive Annex Notes 7a.

### **Internal Structure**



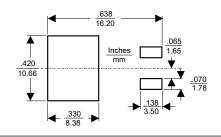
# 12 Amp Super Fast Recovery Rectifier 600 Volts

# D2-PAK



DIMENSIONS					
DIM	INCHES		MM		NOTE
	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	
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**

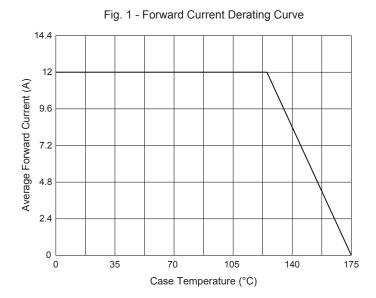


Fig. 3 - Typical Reverse Leakage Characteristics

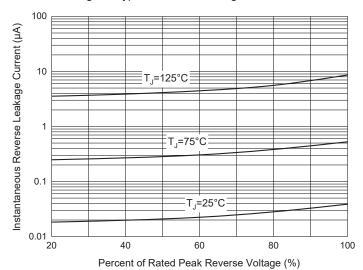


Fig. 2 - Typical Instantaneous Forward Characteristics 20 10 Instantaneous Forward Current (A) 5 2 0.5 0.2 T<sub>J</sub>=25°C 0.1 <del>-</del> 0.4 0.6 8.0 2.0 2.2 1.0 1.2 1.4 1.6 2.4

Instantaneous Forward Voltage (V)

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## **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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