

#### **Features**

- 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
- · Easy Pick And Place
- Super Fast Recovery Times For High Efficiency
- Halogen Free. "Green" Device (Note 2)

# 3 Amp Super Fast Recovery Silicon Rectifier 600 Volts

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 14 °C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum	Maximum DC Blocking Voltage
MURS3JB	MURS3JB	600V	420V	600V

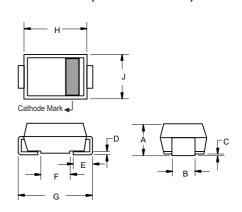
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	3.0A	T <sub>L</sub> =100°C	
Peak Forward Surge Current	I <sub>FSM</sub>	100A	8.3ms,Half Sine	
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.25V	I <sub>FM</sub> =3.0A; T <sub>J</sub> =25°C*	
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	10μΑ 250μΑ	T <sub>J</sub> =25°C; T <sub>J</sub> =100°C	
Maximum Reverse Recovery Time	T <sub>RR</sub>	50ns	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; Irr=0.25A	

<sup>\*</sup>Pulse Test: Pulse Width 300 µsec, Duty Cycle 2%

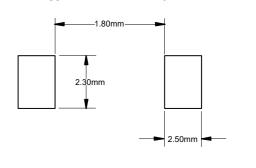
- 1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.
- 2. Halogen free "Green" products are defined as those which contain < 900 ppm bromine,
- <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

# **SMB (DO-214AA)**



DIMENSIONS							
DIM	INCHES		MM		NOTE		
Dilvi	MIN	MAX	MIN	MAX	NOTE		
Α	0.079	0.103	2.00	2.62			
В	0.075	0.087	1.91	2.21			
С	0.002	0.008	0.05	0.20			
D	0.006	0.012	0.15	0.31			
E	0.030	0.060	0.76	1.52			
F	0.065	0.091	1.65	2.32			
G	0.200	0.220	5.08	5.59			
Н	0.160	0.191	4.06	4.85			
J	0.130	0.155	3.30	3.94			

#### **Suggested Solder Pad Layout**





## **Curve Characteristics**

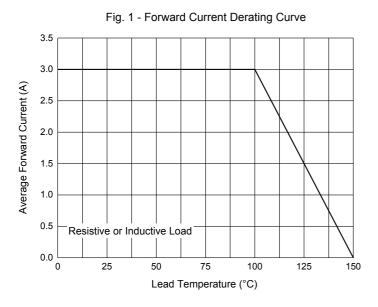
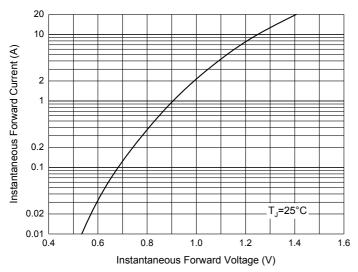


Fig. 3 - Typical Instantaneous Forward Characteristics



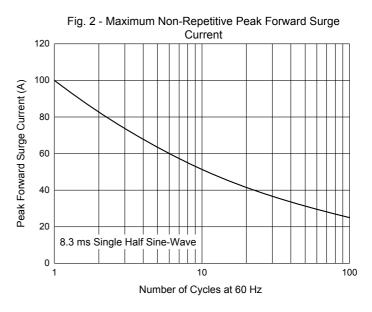
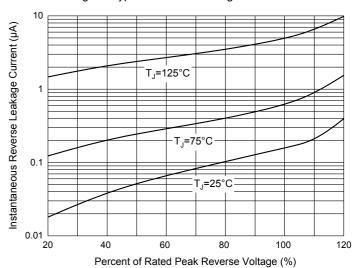


Fig. 4 - Typical Reverse Leakage Characteristics





# **Ordering Information**

Device	Packing	
Part Number-TP	Tape&Reel: 3Kpcs/Reel	

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