

#### **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
- Super Fast Recovery Times For High Efficiency
- Halogen Free. "Green" Device (Note 2)

# **Maximum Ratings**

Operating Junction Temperature Range: -55°C to +150°C

• Storage Temperature Range: -55°C to +150°C

• Typical Thermal Resistance: 25°C/W Junction to Lead

• Typical Thermal Resistance: 35°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage		Maximum DC Blocking Voltage
MURS3GB	MURS3GB	400V	280V	400V

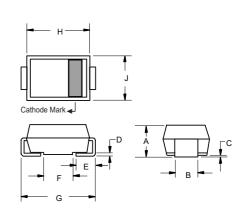
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	3.0A	T <sub>L</sub> =110°C
Peak Forward Surge Current	I <sub>FSM</sub>	100A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.0V 0.92V(Typ)	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>	5.0μA 350μA	T <sub>J</sub> =25°C; T <sub>J</sub> =100°C
Maximum Reverse Recovery Time	T <sub>RR</sub>	25ns(Typ) 35ns(Max)	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; Irr=0.25A
Pulse Energy in Avalanche Mode, Non Repetitive (Inductive Load Switch Off)	E <sub>R</sub>	25mJ	I <sub>(BR)R</sub> =1A, T <sub>J</sub> =25°C
Typical Junction Capacitance	CJ	40pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

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

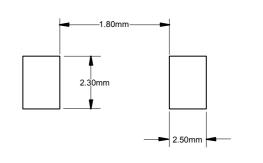
# 3 Amp Super Fast Recovery Rectifier 400 Volts

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



DIMENSIONS								
DIM	INCHES		MM		NOTE			
ווועו	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**



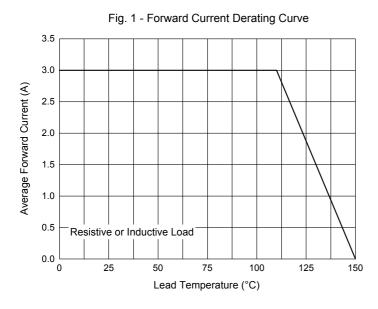
<sup>1.</sup> High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.

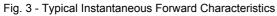
<sup>2.</sup> Halogen free "Green" products are defined as those which contain < 900 ppm bromine,

<sup>&</sup>lt;900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.



## **Curve Characteristics**





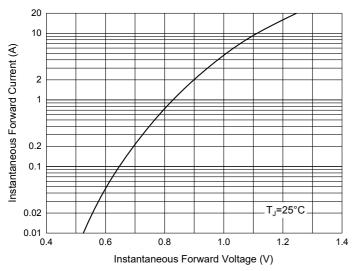
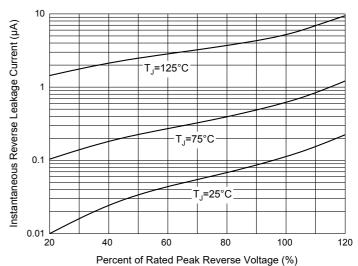


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

120
80
80
40
40
8.3 ms Single Half Sine-Wave
0
1 100
Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics





# **Ordering Information**

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

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