

#### **Features**

- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- · High Current Capability
- Low Forward Voltage Drop
- For Surface Mount Applications
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 2)

# **Maximum Ratings**

- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Typical Thermal Resistance: 20°C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
S2A-L	S2A	50V	35V	50V
S2B-L	S2B	100V	70V	100V
S2D-L	S2D	200V	140V	200V
S2G-L	S2G	400V	280V	400V
S2J-L	S2J	600V	420V	600V
S2K-L	S2K	800V	560V	800V
S2M-L	S2M	1000V	700V	1000V

# Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	2.0A	T <sub>L</sub> =100°C
Peak Forward Surge Current	I <sub>FSM</sub>	50A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.15V	I <sub>FM</sub> =2.0A; T <sub>J</sub> =25°C*
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5μΑ 125μΑ	T <sub>J</sub> =25°C; T <sub>J</sub> =125°C
Typical Junction Capacitance	CJ	20pF	Measured at 1.0MHz V <sub>R</sub> =4.0V

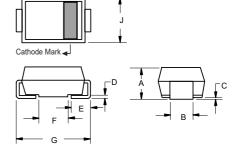
<sup>\*</sup>Pulse Test: Pulse Width 300 µsec, Duty Cycle 2%

#### Note:

- 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.

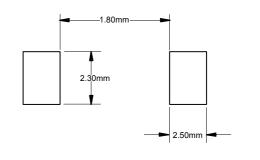
# 2.0 Amp Glass Passivated Silicon Rectifier 50 to 1000 Volts

# SMB (DO-214AA)



DIMENSIONS						
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOIE	
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		
Е	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**

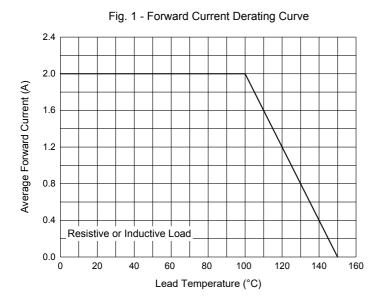


Fig. 3 - Typical Instantaneous Forward Characteristics

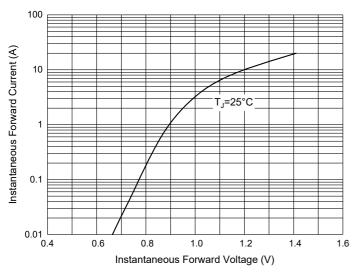


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

40

40

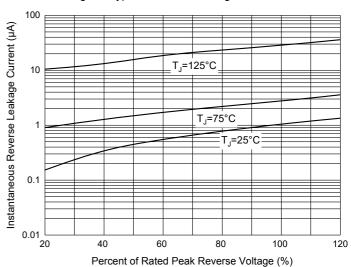
40

8.3 ms Single Half Sine-Wave

0

Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics





# **Ordering Information**

Device	Packing	
S2A-LTP~S2M-LTP	Tape&Reel: 3Kpcs/Reel	

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