



**Micro Commercial Components**

Micro Commercial Components  
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## S2A-LT THRU S2M-LT

### 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
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1

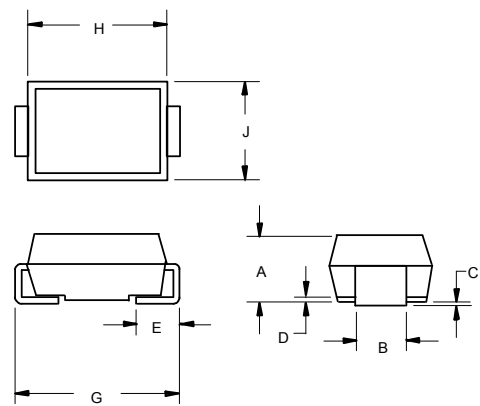
**1.5 Amp  
Glass Passivated  
Silicon Rectifier  
50 to 1000 Volts**

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°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-LT	S2A	50V	35V	50V
S2B-LT	S2B	100V	70V	100V
S2D-LT	S2D	200V	140V	200V
S2G-LT	S2G	400V	280V	400V
S2J-LT	S2J	600V	420V	600V
S2K-LT	S2K	800V	560V	800V
S2M-LT	S2M	1000V	700V	1000V

### DO-214AA (SMB) (Lead Frame)



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.075	.095	1.91	2.41	
B	.077	.083	1.96	2.10	
C	.002	.008	.05	.20	
D	----	.02	----	.51	
E	.030	.060	.76	1.52	
G	.200	.220	5.08	5.59	
H	.160	.187	4.06	4.75	
J	.130	.155	3.30	3.94	

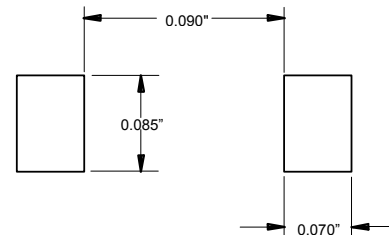
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward current	$I_{F(AV)}$	1.5A	$T_J = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms, half sine wave
Maximum Instantaneous Forward Voltage	$V_F$	1.15V	$I_{FM} = 1.5A$ ; $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0 $\mu\text{A}$ 125 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	20pF	Measured at 1.0MHz, $V_R = 4.0V$

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

### SUGGESTED SOLDER PAD LAYOUT

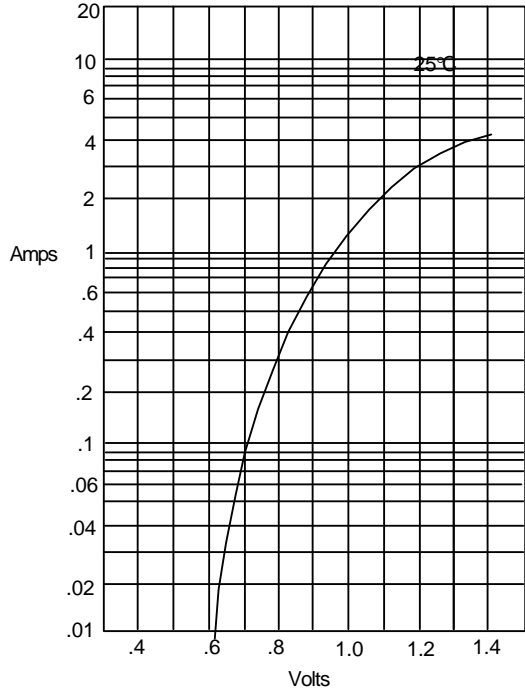


# S2A-LT thru S2M-LT



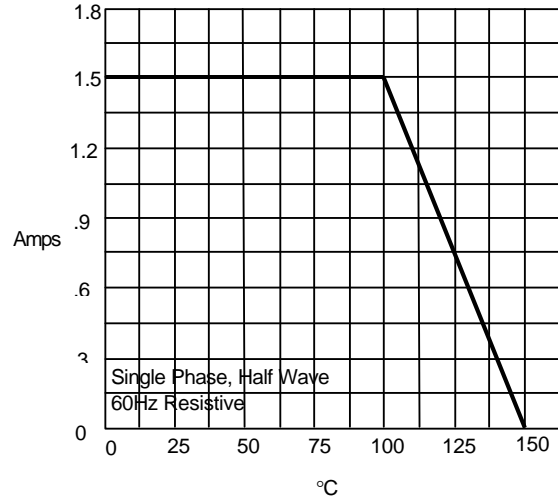
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Figure 1  
Typical Forward Characteristics



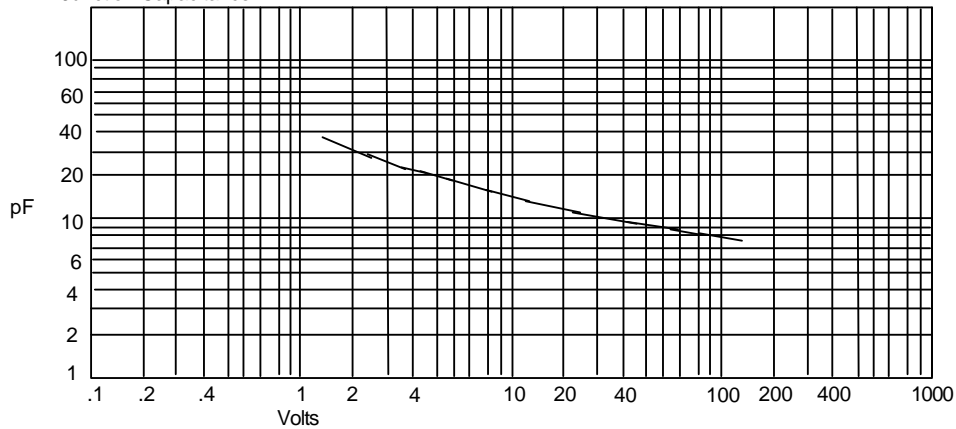
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



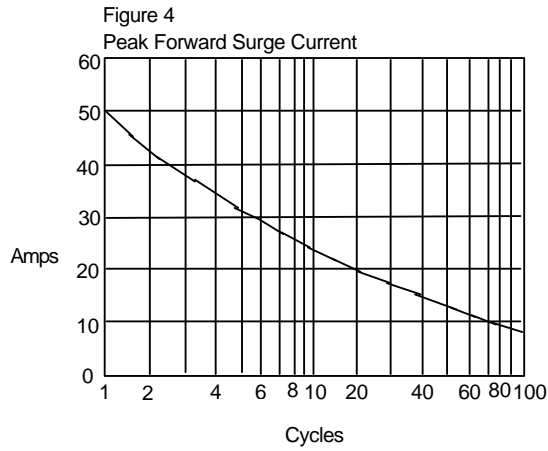
Average Forward Rectified Current - Amperes  
versus

Figure 3  
Junction Capacitance

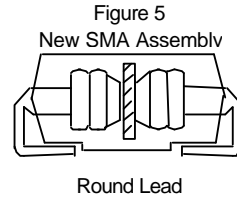


Junction Capacitance - pF versus  
Reverse Junction Potential (Applied V + 0.7 Volts) - Volts

# S2A-LT thru S2M-LT



Peak Forward Surge Current - Amperes *versus*  
Number Of Cycles At 60Hz - Cycles





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## Ordering Information

Device	Packing
(Part Number)P	Tape&Reel;3Kpcs/Reel

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