

TM

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

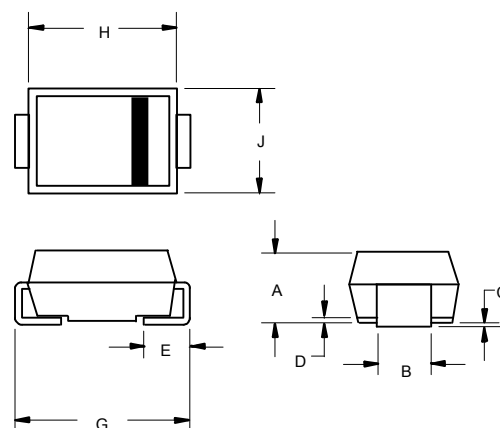
**1.5 Amp
Glass Passivated
Silicon Rectifier
50 to 1000 Volts**

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	DIMENSIONS				NOTE
	INCHES		MM		
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	

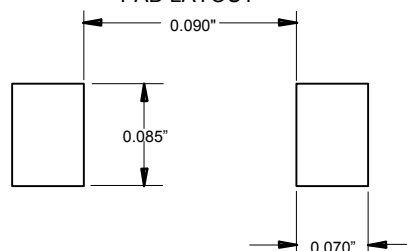
Electrical Characteristics @ 25°C Unless Otherwise Specified

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	$I_{FM} = 1.5\text{A}; T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0 μA 125 μA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	C_J	20pF	Measured at 1.0MHz, $V_R = 4.0\text{V}$

*Pulse test: Pulse width 300 μsec , Duty cycle 2%

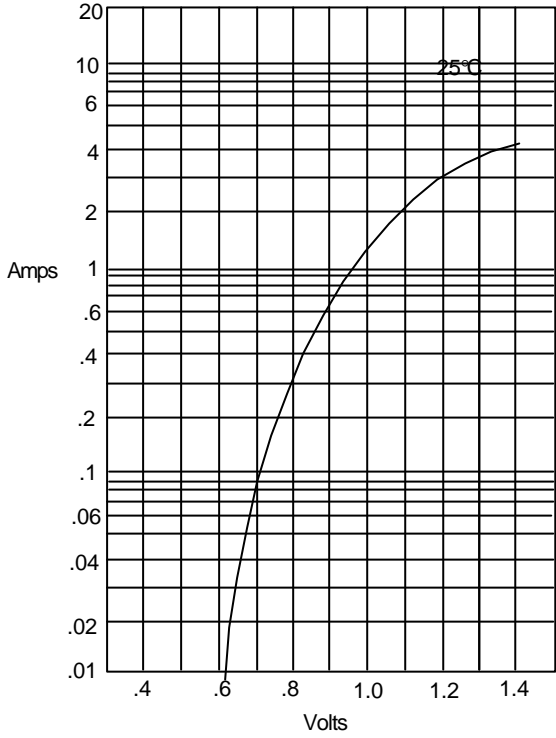
Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

SUGGESTED SOLDER PAD LAYOUT



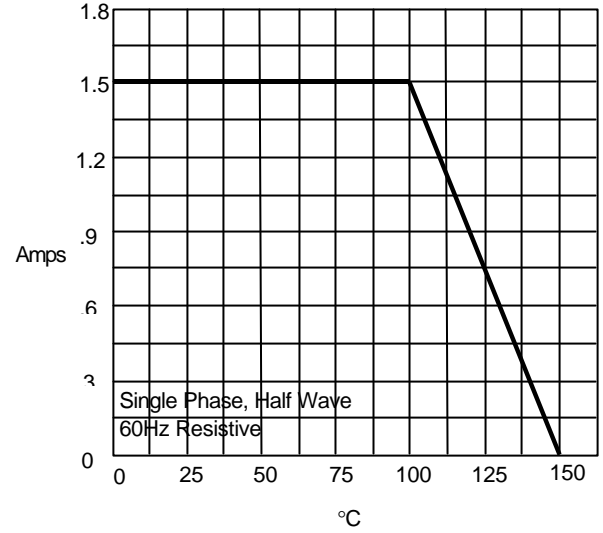
S2A-LT thru S2M-LT

Figure 1
Typical Forward Characteristics



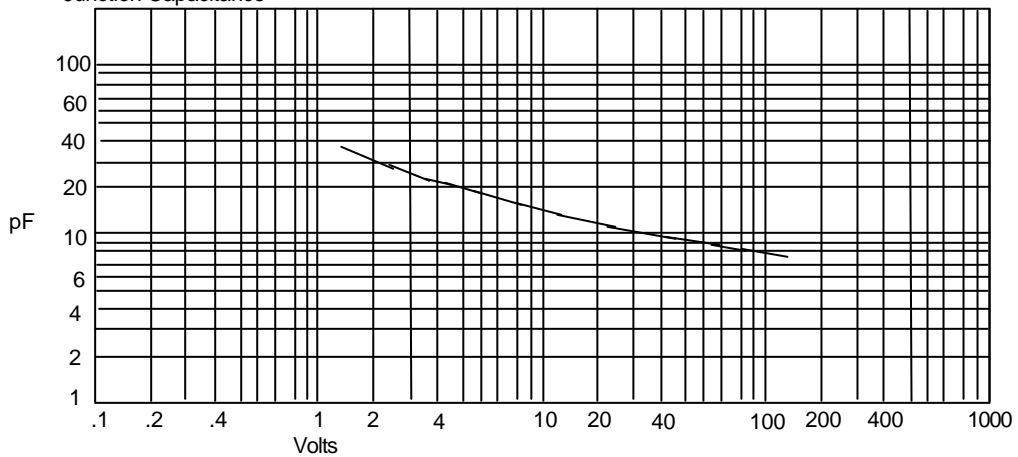
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



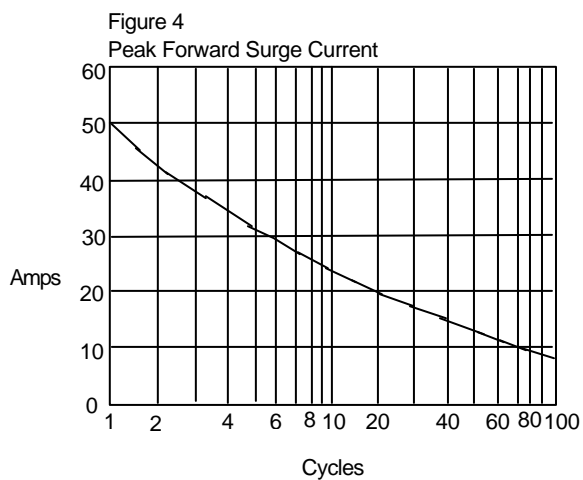
Average Forward Rectified Current - Amperes
versus

Figure 3
Junction Capacitance

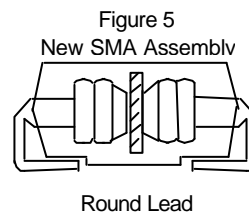


Junction Capacitance - pF *versus*
Reverse Junction Potential (Applied V + 0.7 Volts) - Volts

S2A-LT thru S2M-LT



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



Ordering Information

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

■

■

■

■
