



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939 S2A-L THRU S2M-L

## **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
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
  Halogen free available upon request by adding suffix "-HF"

## **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

|        |         | Maximum      |         | Maximum  |
|--------|---------|--------------|---------|----------|
| MCC    |         | Recurrent    | Maximum | DC       |
| Part   | Device  | Peak Reverse | RMS     | Blocking |
| Number | Marking | Voltage      | Voltage | 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     | V008         | 560V    | 800V     |
| S2M-L  | S2M     | 1000V        | 700V    | 1000V    |

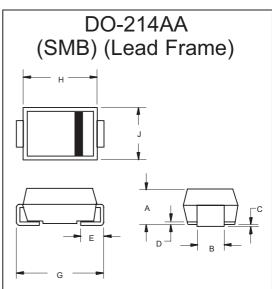
### **Electrical Characteristics @ 25°C Unless Otherwise Specified**

| Average Forward current                                 | I <sub>F(AV)</sub> | 2.0A           | T <sub>L</sub> = 100°C                           |  |  |  |
|---|--------------------|----------------|--|--|--|--|
| Peak Forward Surge<br>Current                           | I <sub>FSM</sub>   | 50A            | 8.3ms, half sine wave                            |  |  |  |
| Maximum<br>Instantaneous<br>Forward Voltage             | V <sub>F</sub>     | 1.15V          | I <sub>FM</sub> =2.0A;<br>T <sub>J</sub> = 25°C* |  |  |  |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I <sub>R</sub>     | 5.0µA<br>125µA | T <sub>J</sub> = 25°C<br>T <sub>J</sub> = 125°C  |  |  |  |
| Typical Junction<br>Capacitance                         | CJ                 | 20pF           | Measured at<br>1.0MHz, V <sub>R</sub> =4.0V      |  |  |  |

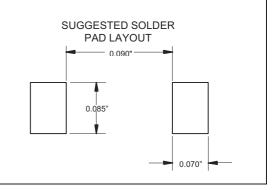
<sup>\*</sup>Pulse test: Pulse width 300 µsec, Duty cycle 2%

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

# 2.0 Amp Glass Passivated Silicon Rectifier 50 to 1000 Volts



| DIMENSIONS |        |      |      |      |      |  |  |
|------------|--------|------|------|------|------|--|--|
|            | INCHES |      | MM   |      |      |  |  |
| DIM        | MIN    | MAX  | MIN  | MAX  | NOTE |  |  |
| Α          | .075   | .095 | 1.91 | 2.41 |      |  |  |
| В          | .077   | .083 | 1.96 | 2.10 |      |  |  |
| О          | .002   | .008 | .05  | .20  |      |  |  |
| D          |        | .02  |      | .51  |      |  |  |
| Е          | .030   | .060 | .76  | 1.52 |      |  |  |
| G          | .200   | .220 | 5.08 | 5.59 |      |  |  |
| Н          | .160   | .187 | 4.06 | 4.75 |      |  |  |
| J          | .130   | .155 | 3.30 | 3.94 |      |  |  |

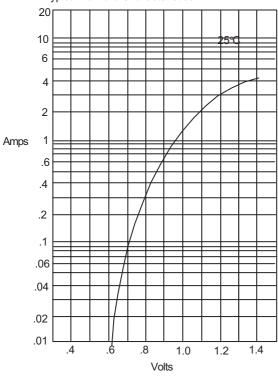


# S2A-L thru S2M-L

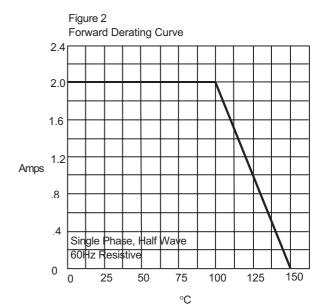


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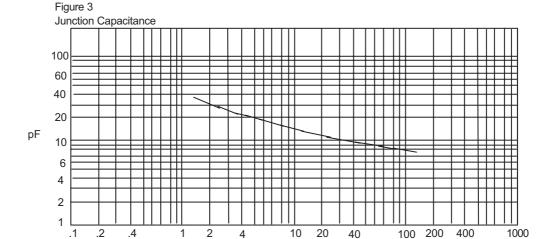




Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts



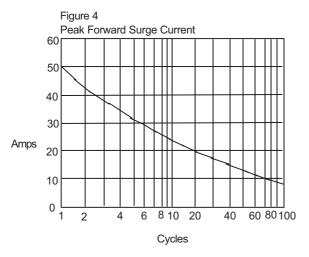
Average Forward Rectified Current - Amperes versus



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

# S2A-L thru S2M-L





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



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## Ordering Information:

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

Note: Adding "-HF" suffix for halogen free, eg. S2A-LTP-HF~S2M-LTP-HF

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