

S1A/B - S1M/B

1.0A SURFACE MOUNT GLASS PASSIVATED RECTIFIER

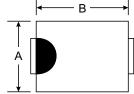
↑ C

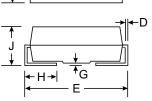
Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop and High Current Capability
- Surge Overload Rating to 30A Peak
- Ideally Suited for Automated Assembly
- Plastic Material: UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: Molded Plastic
- Terminals: Solder Plated Terminal -Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band or Cathode Notch
- SMA Weight: 0.064 grams (approx.)
- SMB Weight: 0.093 grams (approx.)
- Marking: Type Number





| | SI | ΛA | SMB | | | | |
|-----|------|------|------|------|--|--|--|
| Dim | Min | Max | Min | Max | | | |
| Α | 2.29 | 2.92 | 3.30 | 3.94 | | | |
| В | 4.00 | 4.60 | 4.06 | 4.57 | | | |
| С | 1.27 | 1.63 | 1.96 | 2.21 | | | |
| D | 0.15 | 0.31 | 0.15 | 0.31 | | | |
| E | 4.80 | 5.59 | 5.00 | 5.59 | | | |
| G | 0.10 | 0.20 | 0.10 | 0.20 | | | |
| н | 0.76 | 1.52 | 0.76 | 1.52 | | | |
| J | 2.01 | 2.62 | 2.00 | 2.62 | | | |

| A, B, D, G, J, K, M Suffix Designates SMA Package | | | | | | | | | |
|----------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| AB, BB, DB, GB, JB, KB, MB Suffix Designates SMB Package | | | | | | | | | |

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Characteristic | | S1 A/AB | S1 B/BB | S1 D/DB | S1 G/GB | S1 J/JB | S1 K/KB | S1 M/MB | Unit |
|-----------------------------------------------------------------------------------------------------------------------|-------------------|-------------|------------|------------|------------|------------|------------|------------|------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | v |
| RMS Reverse Voltage | | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current @ $T_T = 100^{\circ}C$ I _O 1.0 | | | | | | | Α | | |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | | 30 | | | | | | А | |
| Forward Voltage @ I _F = 1.0 | A V _{FM} | 1.1 | | | | | | V | |
| Peak Reverse Leakage Current at Rated DC Blocking Voltage@ $T_A = 25^{\circ}C$ @ $T_A = 125^{\circ}C$ | | 5.0 100 | | | | | | μA | |
| Typical Junction Capacitance (Note 2) | | 10 | | | | | | pF | |
| Typical Thermal Resistance, Junction to Terminal | | 30 | | | | | | °C/W | |
| Operating and Storage Temperature Range | | -65 to +150 | | | | | | °C | |

Notes: 1. Valid provided that terminals are kept at ambient temperature.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

