

**SuSurface Mount Glass Passivated Rectifiers****Reverse Voltage - 50 to 1000 Volts
Forward Current - 2.0 Amperes****Features**

- For surface mounted applications
- Low reverse leakage current
- Low forward voltage drop
- High surge capacity
- Meet UL flammability classification 94V-0

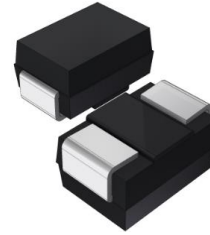
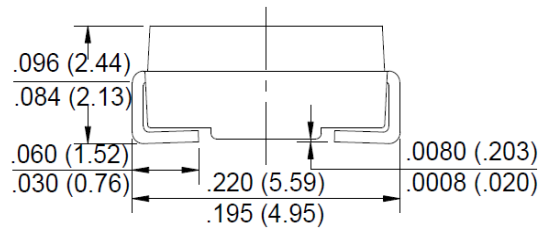
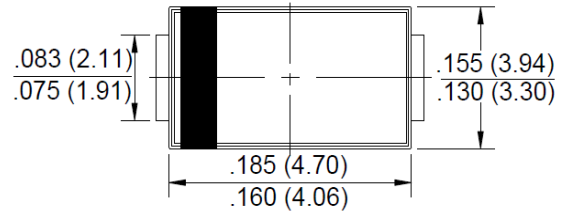
Mechanical Data

- Case: JEDEC SMB molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

Applications

- For use in low voltage, high frequency inverters, polarity protection applications

SMB**RoHS
COMPLIANT**

Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| Characteristics | Symbol | S2A | S2B | S2D | S2G | S2J | S2K | S2M | Unit |
|--|-------------------|------------|-----|-----|-----|-----|-----|------|------------------|
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current @T _L =100 °C | I _(AV) | 2.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) | I _{FSM} | 60 | | | | | | | A |
| I ² t Rating for Fusing (t<8.3mS) | I ² t | 14.9 | | | | | | | A ² s |
| Peak Forward Voltage at 2.0A DC (Note1) | V _F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @T _J =25°C | I _R | 5.0 | | | | | | | uA |
| at Rated DC Blocking Voltage @T _J =125°C | | 125 | | | | | | | |
| Typical Junction Capacitance (Note 2) | C _J | 20 | | | | | | | pF |
| Typical Thermal Resistance Junction to Lead | R _{θJL} | 20 | | | | | | | °C/W |
| Operating Junction Temperature Range | T _J | -55 to+150 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -55 to+150 | | | | | | | °C |

Notes: 1. 300uS pulse width, 2%duty cycle.

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

3. The typical data above is for reference only .



Fig. 1 - Forward Current Derating Curve

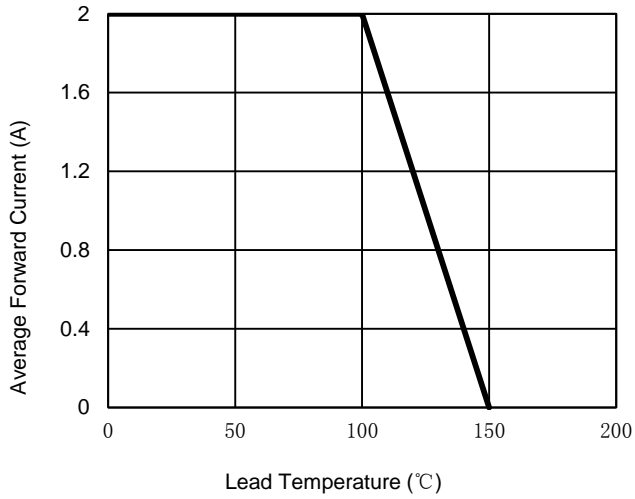


Fig. 2 - Maximum Non-Repetitive Surge Current

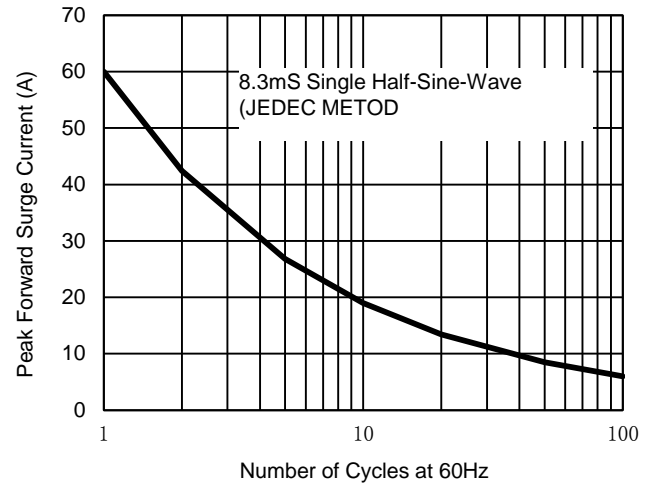


Fig. 3 - Typical Reverse Characteristics

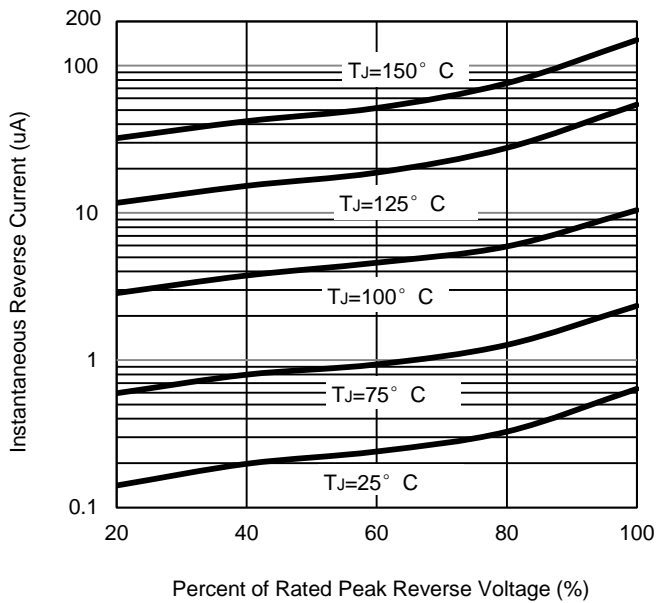


Fig. 4 - Typical Forward Characteristics

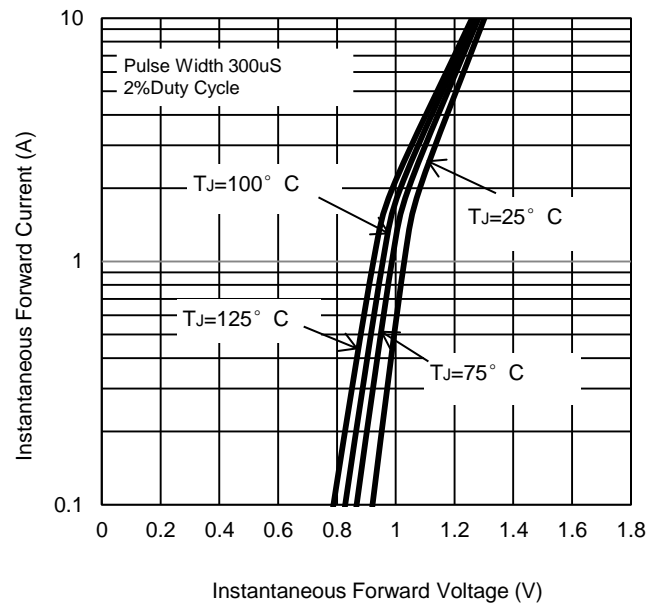
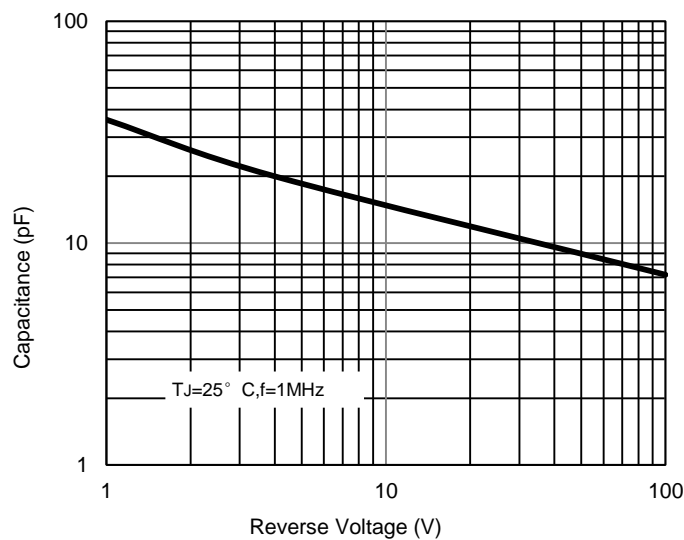


Fig. 5 - Typical Junction Capacitance



The curve above is for reference only.



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