

**SURFACE MOUNT  
GLASS PASSIVATED RECTIFIERS**

REVERSE VOLTAGE - **50 to 1000** Volts  
FORWARD CURRENT - **3.0** Amperes

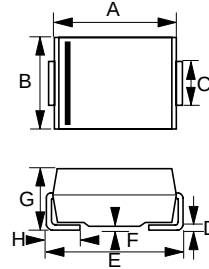
**FEATURES**

- Glass passivated chip
- For surface mounted applications
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0

**MECHANICAL DATA**

- Case : Molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.003 ounces, 0.093 grams

**SMB**



| SMB                          |      |      |
|------------------------------|------|------|
| DIM.                         | MIN. | MAX. |
| A                            | 4.06 | 4.57 |
| B                            | 3.30 | 3.94 |
| C                            | 1.96 | 2.21 |
| D                            | 0.15 | 0.31 |
| E                            | 5.21 | 5.59 |
| F                            | 0.05 | 0.20 |
| G                            | 2.01 | 2.62 |
| H                            | 0.76 | 1.52 |
| All Dimensions in millimeter |      |      |

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings 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            | S3AB        | S3BB | S3DB | S3GB | S3JB | S3KB | S3MB | UNIT |
|-----------------------------------------------------------------------------------------------------------|-------------------|-------------|------|------|------|------|------|------|------|
| Maximum Recurrent Peak Reverse Voltage                                                                    | V <sub>RRM</sub>  | 50          | 100  | 200  | 400  | 600  | 800  | 1000 | V    |
| Maximum RMS Voltage                                                                                       | V <sub>RMS</sub>  | 35          | 70   | 140  | 280  | 420  | 560  | 700  | V    |
| Maximum DC Blocking Voltage                                                                               | V <sub>DC</sub>   | 50          | 100  | 200  | 400  | 600  | 800  | 1000 | V    |
| Maximum Average Forward Rectified Current @T <sub>L</sub> = 75°C                                          | I <sub>(AV)</sub> | 3.0         |      |      |      |      |      |      | A    |
| Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)         | I <sub>FSM</sub>  | 100         |      |      |      |      |      |      | A    |
| Maximum forward Voltage at 3.0A DC                                                                        | V <sub>F</sub>    | 1.15        |      |      |      |      |      |      | V    |
| Maximum DC Reverse Current @T <sub>J</sub> = 25°C<br>at Rated DC Blocking Voltage @T <sub>J</sub> = 125°C | I <sub>R</sub>    | 10<br>250   |      |      |      |      |      |      | uA   |
| Typical Junction Capacitance (Note 1)                                                                     | C <sub>J</sub>    | 40          |      |      |      |      |      |      | pF   |
| Typical Thermal Resistance (Note 2)                                                                       | R <sub>θJL</sub>  | 10          |      |      |      |      |      |      | °C/W |
| Typical Thermal Resistance (Note 3)                                                                       | R <sub>θJA</sub>  | 50          |      |      |      |      |      |      | °C/W |
| Operating Temperature Range                                                                               | T <sub>J</sub>    | -55 to +150 |      |      |      |      |      |      | °C   |
| Storage Temperature Range                                                                                 | T <sub>STG</sub>  | -55 to +150 |      |      |      |      |      |      | °C   |

NOTES : 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2. Thermal Resistance Junction to Lead.  
3. Thermal Resistance Junction to Ambient.

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