



## RC15S01G THRU RC15S10G

### SILICON GPP CELL RECTIFIER

### TECHNICAL SPECIFICATION

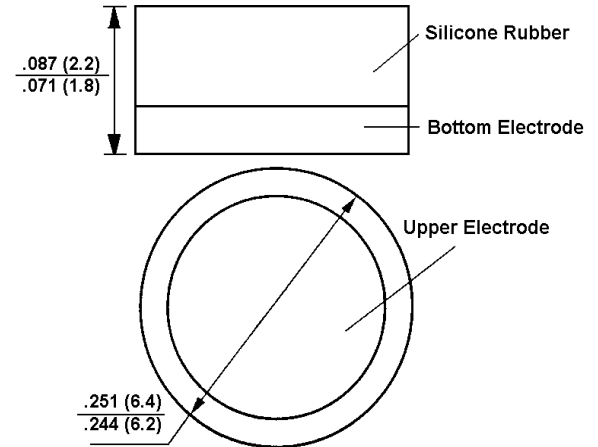
**VOLTAGE: 100 TO 1000V CURRENT: 15A**

#### FEATURES

- Glass passivated junction chip
- High surge capability
- Solderable electrode surfaces
- Ideal for hybrids

#### MECHANICAL DATA

- Polarity: Bottom or upper electrode denotes cathode according to the notice in in package



Dimensions in inches and (millimeters)

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Single-phase, half-wave, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

| RATINGS  | SYMBOL         | RC15S<br>01G | RC15S<br>02G | RC15S<br>04G | RC15S<br>06G | RC15S<br>08G | RC15S<br>10G | UNITS                          |
|--|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------------------|
| Maximum Repetitive Peak Reverse Voltage  | $V_{RRM}$      | 100          | 200          | 400          | 600          | 800          | 1000         | V                              |
| Maximum RMS Voltage  | $V_{RMS}$      | 70           | 140          | 280          | 420          | 560          | 700          | V                              |
| Maximum DC Blocking Voltage  | $V_{DC}$       | 100          | 200          | 400          | 600          | 800          | 1000         | V                              |
| Maximum Average Forward Rectified Current<br>( $T_a=55^\circ\text{C}$ ) (Note 2)       | $I_{F(AV)}$    | 15           |              |              |              |              |              | A                              |
| Peak Forward Surge Current (8.3ms single<br>half sine-wave superimposed on rated load) | $I_{FSM}$      | 400          |              |              |              |              |              | A                              |
| Maximum Instantaneous Forward Voltage<br>(at rated forward current)                    | $V_F$          | 1.0          |              |              |              |              |              | V                              |
| Maximum DC Reverse Current<br>(at rated DC blocking voltage)                           | $I_R$          | 10<br>300    |              |              |              |              |              | $\mu\text{A}$<br>$\mu\text{A}$ |
| Typical Junction Capacitance (Note 1)  | $C_J$          | 300          |              |              |              |              |              | pF                             |
| Typical Thermal Resistance (Note 3)  | $R_\theta(ja)$ | 1            |              |              |              |              |              | $^\circ\text{C}/\text{W}$      |
| Storage and Operation Junction Temperature   | $T_{STG}, T_J$ | -50 to +150  |              |              |              |              |              | $^\circ\text{C}$               |

Note:

1. Measured at 1 MHz and applied voltage of 4.0V<sub>dc</sub>
2. When mounted to heat sink from body.
3. Thermal resistance from junction to ambient.