



RC30S01G THRU RC30S10G

SILICON GPP CELL RECTIFIER

TECHNICAL
SPECIFICATION

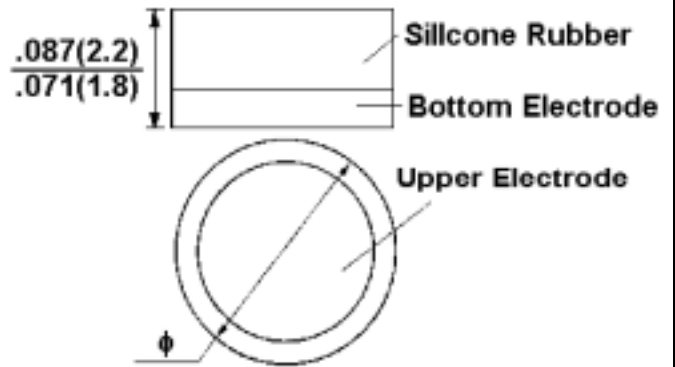
VOLTAGE: 100 TO 1000V CURRENT: 30A

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 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 | RC30S 01G | RC30S 02G | RC30S 04G | RC30S 06G | RC30S 08G | RC30S 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 ($T_a=55^\circ\text{C}$) (Note 2) | $I_{F(AV)}$ | 30 | | | | | | A |
| Peak Forward Surge Current (8.3ms single half sine-wave superimposed on rated load) | I_{FSM} | 400 | | | | | | A |
| Maximum Instantaneous Forward Voltage (at rated forward current) | V_F | 1.00 | | | | | | V |
| Maximum DC Reverse Current (at rated DC blocking voltage) | I_R | $T_a=25^\circ\text{C}$ 10 | | | | | | μA |
| | | $T_a=150^\circ\text{C}$ 750 | | | | | | μA |
| Typical Junction Capacitance (Note 1) | C_J | 300 | | | | | | pF |
| Typical Thermal Resistance (Note 3) | $R_\theta(ja)$ | 1 | | | | | | $^\circ\text{C/W}$ |
| 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 $4.0V_{dc}$
2. When mounted to heat sink from body.
3. Thermal resistance from junction to ambient.