



## RC30S01 THRU RC30S10

### SILICON SILASTIC CELL RECTIFIER

### TECHNICAL SPECIFICATION

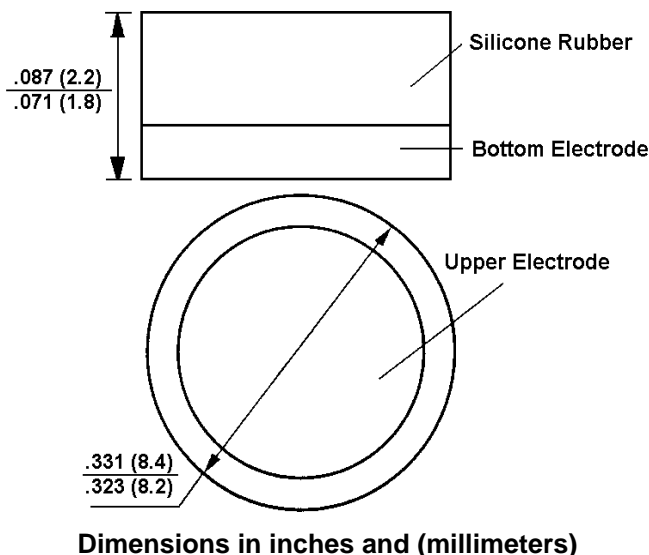
**VOLTAGE: 100 TO 1000V CURRENT: 30A**

#### FEATURES

- Low cost
- High surge capability
- Solderable electrode surfaces
- Ideal for hybrids

#### MECHANICAL DATA

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



#### 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	RC30S	RC30S	RC30S	RC30S	RC30S	UNITS
		01	02	04	06	08	10	
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)	$V_F$	0.95						V
Maximum DC Reverse Current (at rated DC blocking voltage)	$I_R$	$T_a=25^\circ\text{C}$ 10						$\mu\text{A}$
		$T_a=150^\circ\text{C}$ 1000						$\mu\text{A}$
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<sub>dc</sub>
2. When mounted to heat sink from body.
3. Thermal resistance from junction to ambient.