



SHANGHAI SUNRISE ELECTRONICS CO., LTD.

RC30S01 THRU RC30S10

SILICON SILASTIC
CELL RECTIFIER

TECHNICAL
SPECIFICATION

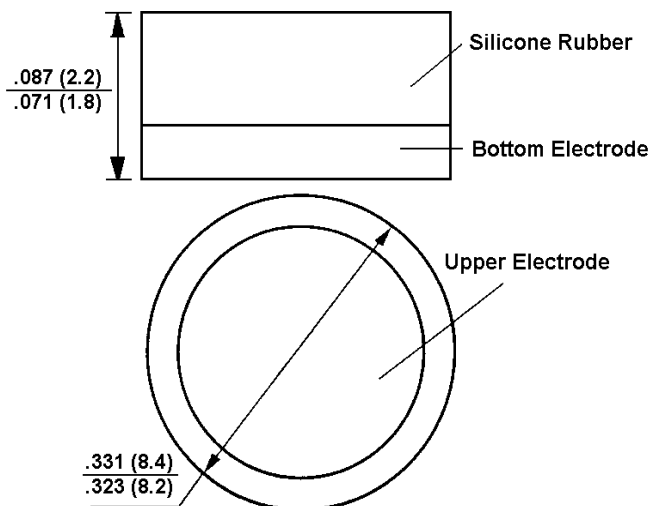
VOLTAGE: 100 TO 1000V CURRENT: 30A

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 01	RC30S 02	RC30S 04	RC30S 06	RC30S 08	RC30S 10	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	0.95						V
Maximum DC Reverse Current $T_a=25^\circ\text{C}$ (at rated DC blocking voltage) $T_a=150^\circ\text{C}$	I_R	10 1000						μA 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.