



# SHANGHAI SUNRISE ELECTRONICS CO., LTD.

## RC10S01 THRU RC10S10

### SILICON SILASTIC CELL RECTIFIER

### TECHNICAL SPECIFICATION

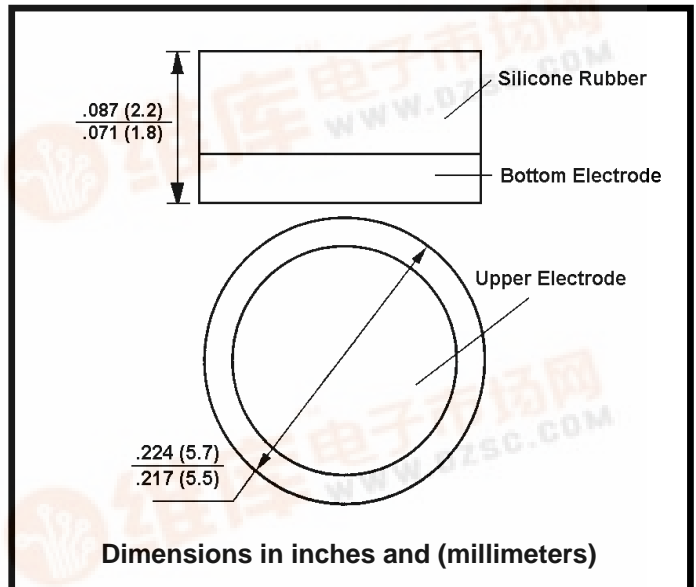
**VOLTAGE: 100 TO 1000V CURRENT: 10A**

#### 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	RC10S 01	RC10S 02	RC10S 04	RC10S 06	RC10S 08	RC10S 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)	$I_{F(AV)}$	10						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)	$V_F$	1.0						V
Maximum DC Reverse Current (at rated DC blocking voltage)	$I_R$	10 500						$\mu\text{A}$ $\mu\text{A}$
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.

