

RC8005 THRU RC810

SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE: 50-1000V

CURRENT: 8.0A

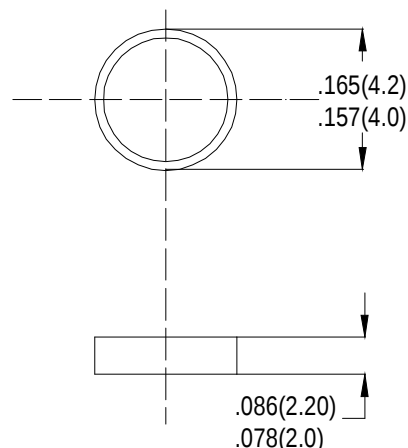
FEATURES

- Surge overload ratings-150 Amperes
- Good for printed circuit board assembly

MECHANICAL DATA

- **Case:** Silicon rubber passivated
- **Epoxy:** UL 94V-0 rate flame retardant
- **Lead:** MIL-STD- 202E, Method 208 guaranteed
- **Polarity:** As marked
- **Mounting position:** Any
- **Weight:** 1.88 grams

C-1



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

		SYMBOL	RC8005	RC801	RC802	RC804	RC806	RC808	RC810	units
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage		V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward rectified Output Current at T _A =50°C		I_o	8.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)		I_{FSM}	150							A
Maximum Forward Voltage Drop per element at 8.0A DC		V_F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@ T _A =25°C	I_R	5.0							µA
	@ T _A =100°C		500							
I ² t Rating for Fusing (t < 8.3ms)		I²t	10							A²S
Typical Junction Capacitance (Note 1)		C_J	25							pF
Typical Thermal Resistance (Note 2)		R_{θJA}	40							°C/W

Notes: 1. Measured at 1MHz and applied reverse voltage of 4.0 volts

2. Thermal Resistance from Junction to lead mounted on P.C.B with 0.47×0.47" (12×12mm) copper pads