RC201 THRU RC207

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 2.0 Amperes

FEATURES

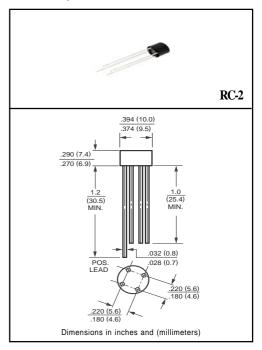
- * Reverse voltage to 1000v
- * Surge overload ratings to 50 amperes peak
- * Good for printed circuit board assembly
- * Mounting position: Any
- * Weight: 1.88 grams
- * Silver-plated copper leads

MECHANICAL DATA

- * UL listed the recognized component directory, file #E94233
- * Epoxy: Device has UL flammability classification 94V-O

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	RC201	RC202	RC203	RC204	RC205	RC206	RC207	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current at TA = 25°C	lo	2.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave	IFSM 50						Amno		
superimposed on rated load (JEDEC method)								Amps	
Typical Thermal Resistance from junction to ambient	RθJA	40							°C/W
Typical Thermal Resistance from junction to case	RθJC	12							
Operating Temperature Range	TJ	-55 to + 150						٥C	
Storage Temperature Range	Тѕтс	-55 to + 150							۰C

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	RC201	RC202	RC203	RC204	RC205	RC206	RC207	UNITS
Maximum Forward Voltage Drop per Bridge Element at 2.0A DC		VF	1.1						Volts	
Maximum Reverse Current at Rated	@TA = 25°C	lo.	5.0							uAmps
DC Blocking Voltage per element	@Ta = 125°C	- IR				0.5				mAmps

RATING AND CHARACTERISTIC CURVES (RC201 THRU RC207)

FIG. 1 - MAXIMUM FORWARD SURGE CURRENT 60 PEAK FORWARD SURGE CURRENT, (A) 50 8.3ms Single Half Sine-Wave (JEDED Method) 40 30 20 0 2 1 6 8 1 0 20 40 60 4 100 NUMBER OF CYCLES AT 60Hz

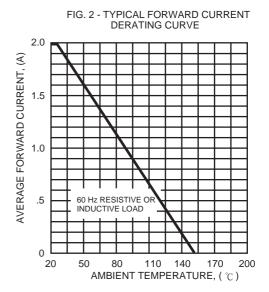


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS 10 INSTANTANEOUS REVERSE CURRENT, (uA) 6 4 2 . TJ = 100℃ 1.0 .6 .4 .2 .1 .06 .04 T_J = 25°C .02 .01 0 20 40 60 80 100 120 140 PERCENT OF RATED PEAK REVERSE VOLTAGE, (%)

