

# DC COMPONENTS CO., LTD.

## RECTIFIER SPECIALISTS

RC201 THRU RC207

# TECHNICAL SPECIFICATIONS OF SINGLE-PHASE SILICON BRIDGE RECTIFIER VOLTAGE RANGE - 50 to 1000 Volts CURRENT - 2.0 Amperes

#### **FEATURES**

- \* Surge overload ratings to 50 Amperes peak
- \* Ideal for printed circuit board assembly

#### MECHANICAL DATA

\* Case: Molded plastic

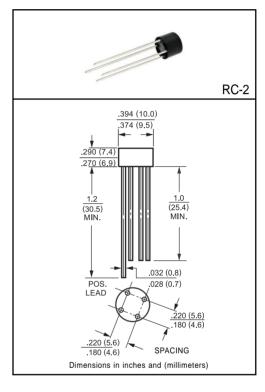
\* Epoxy: UL 94V-0 rate flame retardant

\* Lead: MIL-STD-202E, Method 208 guaranteed

\* Polarity: As marked \* Mounting position: Any \* Weight: 1.88 grams

#### 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%.

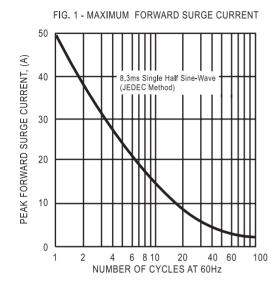


		SYMBOL	RC201	RC202	RC203	RC204	RC205	RC206	RC207	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage		VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current at TA = 25°C		lo	2.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	50							Amps
Maximum Forward Voltage Drop per element at 1.0A DC		VF	1.1						Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@TA = 25°C	- IR	10							- uAmps
	@Ta = 100°C		500							
I <sup>2</sup> t Rating for Fusing (t<8.3ms)		l <sup>2</sup> t	10							A <sup>2</sup> Sec
Typical Junction Capacitance ( Note1)		Cı	25							pF
Typical Thermal Resistance (Note 2)		RθJA	40							°C/W
Operating Temperature Range		TJ	-55 to + 125							°C
Storage Temperature Range		Тѕтс	-55 to + 150						°C	

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

<sup>2.</sup> Thermal Resistance from Junction to Ambient and from junction to lead mounted on P.C.B. with 0.47 x 0.47" (12x12mm) copper pads.

### RATING AND CHARACTERISTIC CURVES (RC201 THRU RC207)



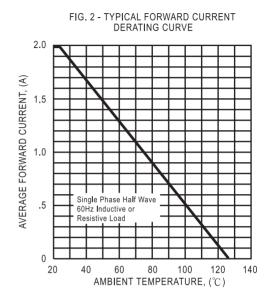


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS 10 INSTANTANEOUS REVERSE CURRENT, (uA) 6 4 2 -TJ = 100℃ 1.0 .6 .4 .2 .1 .06 TJ = 25°C .04 .02 .01 0 20 40 80 100 120 140 PERCENT OF RATED PEAK REVERSE VOLTAGE, (%)

