

RS501 THRU RS507

SINGLE-PHASE SILICON BRIDGE RECTIFIER

VOLTAGE: 50-1000V

CURRENT: 5.0A

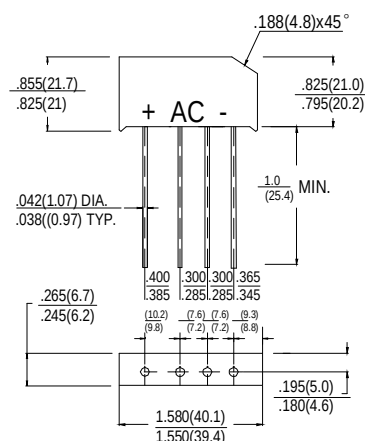
FEATURES

- Ideal for printed circuit board
- Surge overload ratings-150 Amperes

MECHANICAL DATA

- **Case:** plastic encapsulation
- **Epoxy:** UL 94V-0 rate flame retardant
- **Lead:** MIL-STD- 202E, Method 208 guaranteed
- **Polarity:** As marked
- **Mounting position:** Any
- **Weight:** 2.74 grams

RS-5



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	RS501	RS502	RS503	RS504	RS505	RS506	RS507	units
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage		V_{RMS}	46	88	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 =75°C		I_o	5.0							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 2.5A DC		V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	@ T _A =25°C	I_R	10							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	15							pF

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

2. Thermal Resistance from Junction to Ambient and from junction to lead mounted on P.C.B. with 0.47×0.47 (12x12mm) copper pads