

**SINGLE-PHASE GLASS PASSIVATED**  
**SILICON BRIDGE RECTIFIER**

**VOLTAGE RANGE 50 to 1000 Volts CURRENT 8.0 Amperes**

**FEATURES**

- \* Low leakage
- \* Low forward voltage
- \* Mounting position: Any
- \* Surge overload rating: 250 amperes peak
- \* Ideal for printed circuit boards
- \* High forward surge current capability

**MECHANICAL DATA**

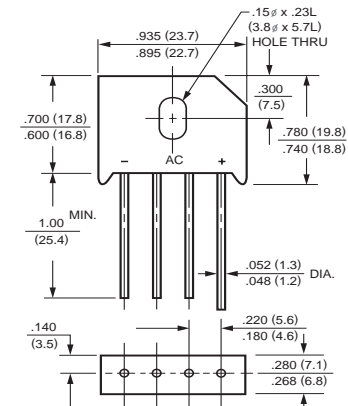
- \* UL listed the recognized component directory, file #E94233
- \* Epoxy: Device has UL flammability classification 94V-O

**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%.



**RS-8**



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	RS801	RS802	RS803	RS804	RS805	RS806	RS807	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 Rectified Output Current at Tc = 75°C with heat sink	Io	8.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	IFSM	250							Amps
Typical Thermal Resistance (Note 1)	R θJA	18							°C/W
(Note 2)	R θJC	7							
Operating and Storage Temperature Range	TJ, TSTG	-55 to + 150							°C

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

CHARACTERISTICS	SYMBOL	RS801	RS802	RS803	RS804	RS805	RS806	RS807	UNITS	
Maximum Forward Voltage Drop per element at 8.0A DC	VF	1.2							Volts	
Maximum Reverse Current at Rated	IR	5.0							@TA = 25°C	uAmps
DC Blocking Voltage per element									@TA = 125°C	1.0

NOTES: 1. Units mounted in free air, no heatsink, P.C.B. at 0.375" (9.5mm) lead length with 0.5x0.5" (12x12mm) copper pads.  
 2. Units mounted on a 3.0x3.0x0.11" thick (7.5x7.5x0.3cm) Al. Plate heatsink.  
 3. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

# RATING AND CHARACTERISTIC CURVES (RS801 THRU RS807)

