

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**
VOLTAGE RANGE 50 to 1000 Volts CURRENT 8.0 Amperes

FEATURES

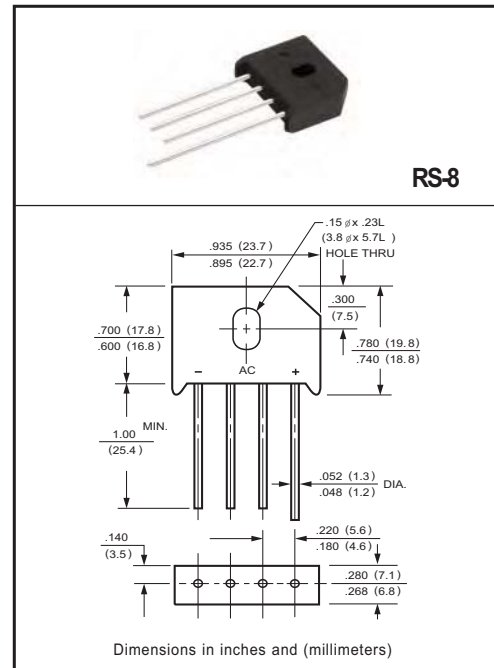
- * Ideal for printed circuit board
- * Surge overload rating: 50 amperes peak
- * Low leakage
- * Mounting position: Any
- * Low forward voltage
- * High forward surge current capability

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-0
- * UL listed the recognized component directory, file #94233

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
resistive or inductive load.



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

RATINGS	SYMBOL	RS801	RS802	RS803	RS804	RS805	RS806	RS807	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T _C = 75 °C	I _O	8.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	250							Amps
Current Squared Time	I ² T	259.2							A ² /Sec
Typical Thermal Resistance (Note 1)	R _{θJC}	7							°C/W
	R _{θJA}	18							
Current Square Time Value	I ² T	259.3							A ² S
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to + 150							°C

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

CHARACTERISTICS	SYMBOL	RS801	RS802	RS803	RS804	RS805	RS806	RS807	UNITS
Maximum Instantaneous Forward Voltage at 8.0A DC	V _F	1.2							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T _A = 25 °C	5.0							uAmps
	@T _A = 100 °C	200							

NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".
3. Measured at 1MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTICS CURVES (RS801 THRU RS807)

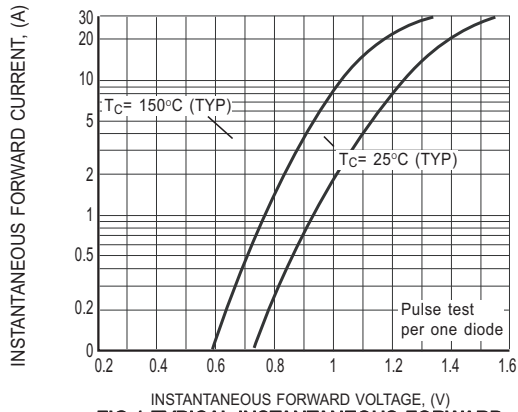


FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

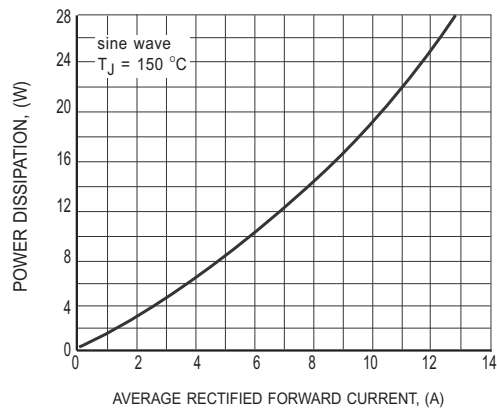


FIG.2 POWER DISSIPATION

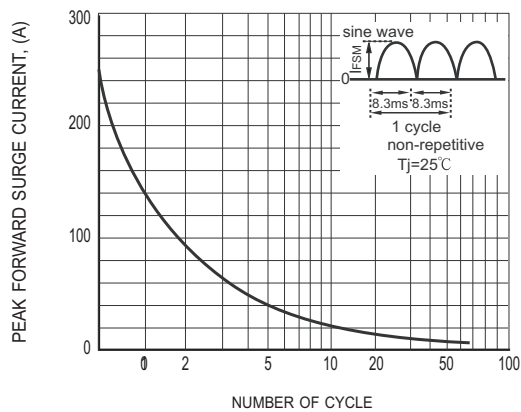


FIG.3 SURGE FORWARD CURRENT CAPABILITY

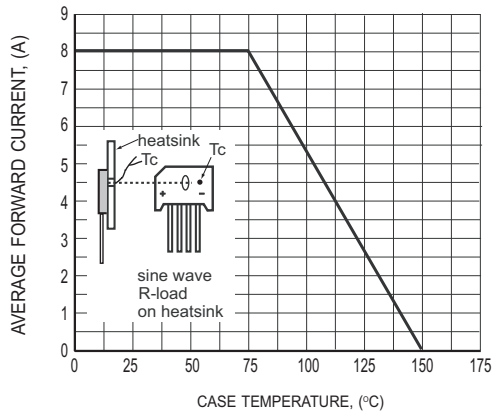


FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

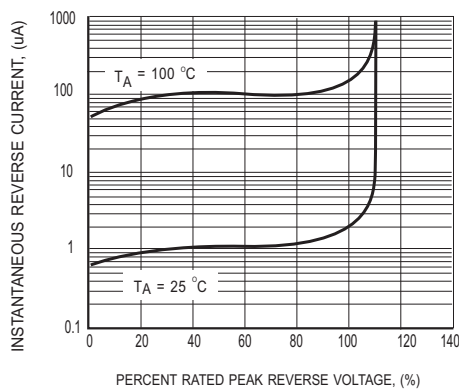


FIG.5 TYPICAL REVERSE CHARACTERISTICS

Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

BULK PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
RS-8	-B	200	236*236*34	497*255*162	1,600	13.6 / 14.5

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