

SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 6.0 Amperes

FEATURES

- * Low leakage
- * Low forward voltage
- * Mounting position: Any
- * Surge overload rating: 150 amperes peak
- * Silver-plated copper leads

MECHANICAL DATA

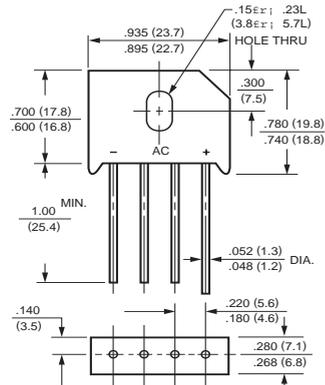
- * Epoxy : UL flammability classification 94V-0
- * UL listed under the recognized component directory, File# E94233

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-6



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	RS601	RS602	RS603	RS604	RS605	RS606	RS607	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input 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 Output Current at Tc = 75°C	I _O	6.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	150							Amps
Typical Thermal Resistance (NOTE 1)	R _{θJA}	28							°C/W
Typical Thermal Resistance (NOTE 2)	R _{θJC}	7.5							
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to + 150							°C

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

CHARACTERISTICS	SYMBOL	RS601	RS602	RS603	RS604	RS605	RS606	RS607	UNITS	
Maximum Forward Voltage Drop per element at 6.0A DC	V _F					1.1				Volts
Maximum Reverse Current at Rated	I _R					5.0				uAmps
						1.0				mAmps
DC Blocking Voltage per element						1.0				mAmps

NOTES: 1. Thermal resistance from junction to ambient with units in free air, P.C.B. mounted on 0.5x0.5" (12x12mm) copper pads, 0.375" (9.5mm) lead length. 2005-3
 2. Thermal resistance from junction to case with units mounted on a 2.6x1.4x0.06" thick (6.5x3.5x.15cm) Al. Plate.
 3. "Fully ROHS compliant", "100% Sn plating (Pb-free)". REV: A

RATING AND CHARACTERISTIC CURVES (RS601 THRU RS607)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

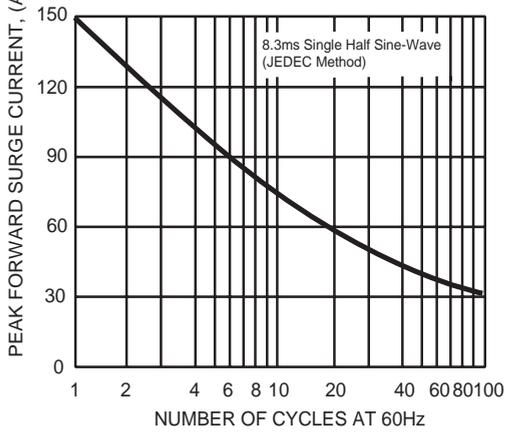


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

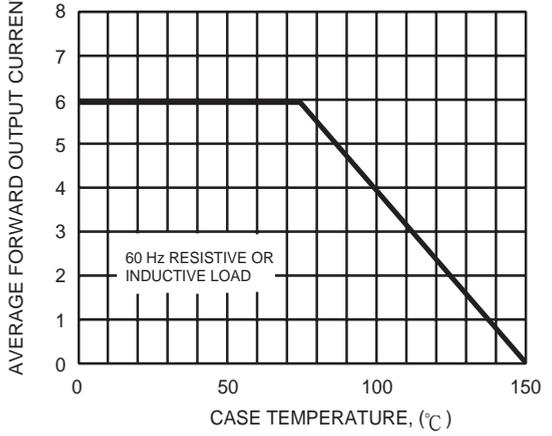


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

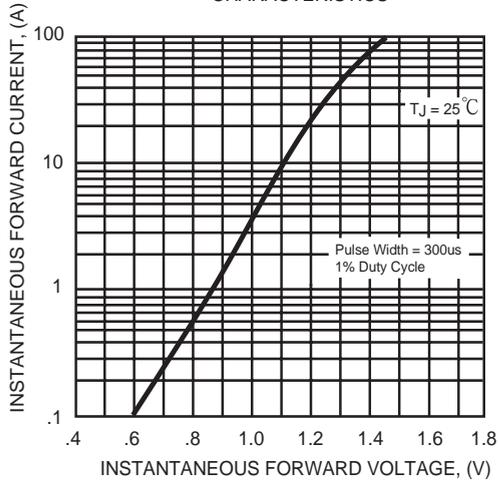


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

