

**SINGLE-PHASE GLASS PASSIVATED  
SILICON BRIDGE RECTIFIER**  
VOLTAGE RANGE 50 to 1000 Volts CURRENT 2.0 Amperes

**FEATURES**

- \* Ideal for printed circuit board
- \* Surge overload rating: 50 amperes peak
- \* Weight: 2.74 grams
- \* Mounting position: Any

**MECHANICAL DATA**

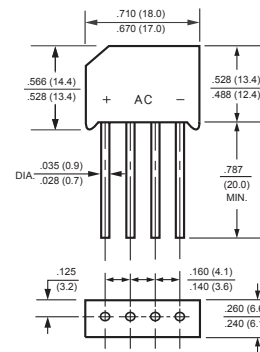
- \* Epoxy: Device has UL flammability classification 94V-0
- \* UL listed the recognized component directory, file #94233

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.



RS-2



Dimensions in inches and (millimeters)

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

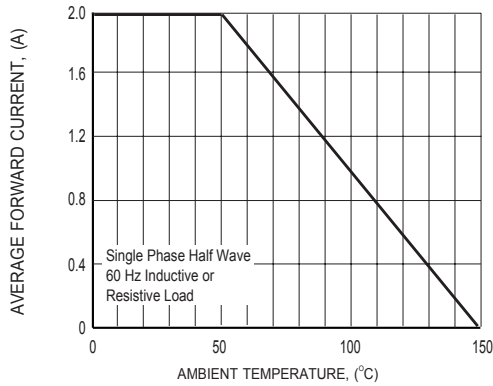
RATINGS	SYMBOL	RS201	RS202	RS203	RS204	RS205	RS206	RS207	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T <sub>A</sub> = 50°C	I <sub>O</sub>	2.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	50							Amps
Typical Thermal Resistance (Note 1)	R <sub>θJC</sub>	15							°C/W
	R <sub>θJA</sub>	40							
Typical Junction Capacitance (Note 3)	C <sub>J</sub>	15							pF
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150							°C

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

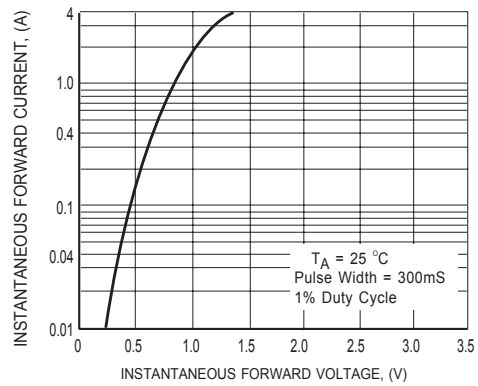
CHARACTERISTICS	SYMBOL	RS201	RS202	RS203	RS204	RS205	RS206	RS207	UNITS
Maximum Instantaneous Forward Voltage at 2.0A DC	V <sub>F</sub>	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ T <sub>A</sub> = 25°C	5.0							μAmps
	@ T <sub>A</sub> = 100°C	100							

- 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.

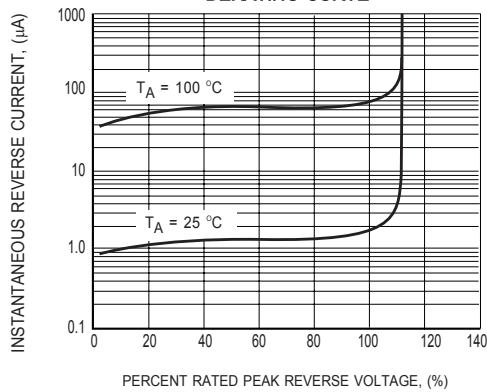
## RATING AND CHARACTERISTICS CURVES ( RS201 THRU RS207 )



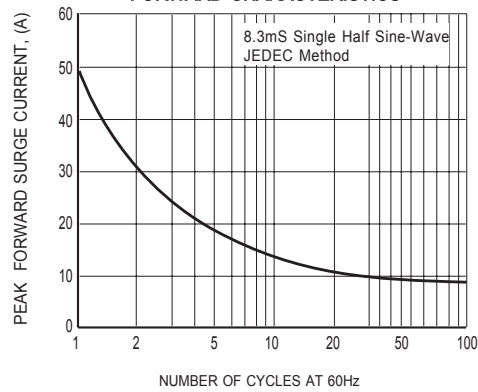
**FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.3 TYPICAL REVERSE CHARACTERISTICS**



**FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**

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