

SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 4.0 Ampere

FEATURES

- * Ideal for printed circuit board
- * Surge overload rating: 150 amperes peak
- * Mounting position: Any
- * Weight: 4.8 grams
- * Molded structure

MECHANICAL DATA

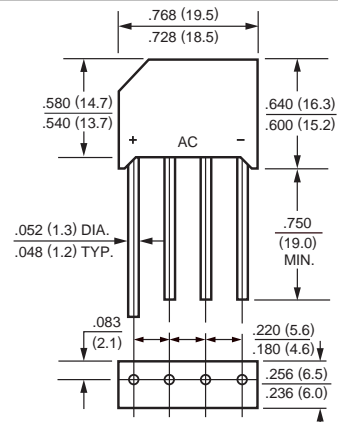
- * UL listed the recognized component directory, file #E94233
- * Epoxy: Device has UL flammability classification 94V-0

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-4L



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	RS401L	RS402L	RS403L	RS404L	RS405L	RS406L	RS407L	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 Output Current TA = 50°C	IO	4.0								Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	150								Amps
Typical Thermal Resistance from junction to case (Note 2)	RθJC	10								°C/W
Typical Thermal Resistance from junction to ambient	RθJA	28								°C/W
Operating Temperature Range	TJ	-55 to + 150								°C
Storage Temperature Range	TSTG	-55 to + 150								°C
Typical Junction Capacitance (Note)	CJ	40								pF

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

CHARACTERISTICS	SYMBOL	RS401L	RS402L	RS403L	RS404L	RS405L	RS406L	RS407L	UNITS	
Maximum Forward Voltage Drop per Bridge Element at 4.0A DC	VF	1.0								Volts
Maximum Reverse Current at Rated	IR	5.0								uAmps
Dc Blocking Voltage per element		1.0								mAmps

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts
 2. Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.
 3. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

RATING AND CHARACTERISTIC CURVES (RS401L THRU RS407L)

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

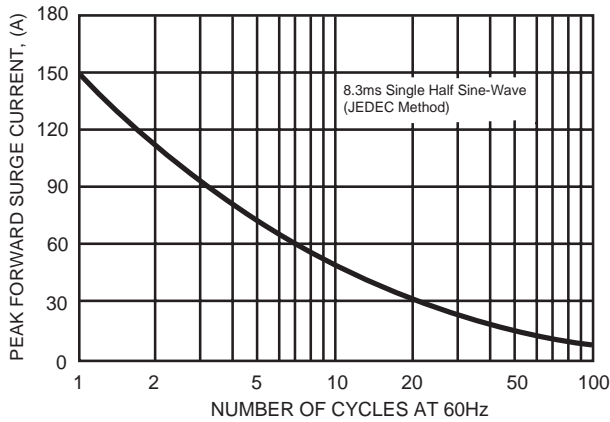


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

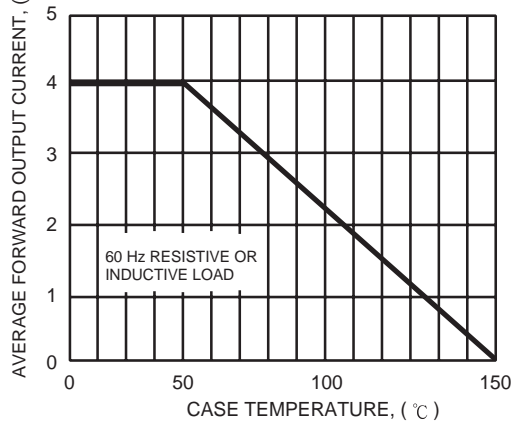


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

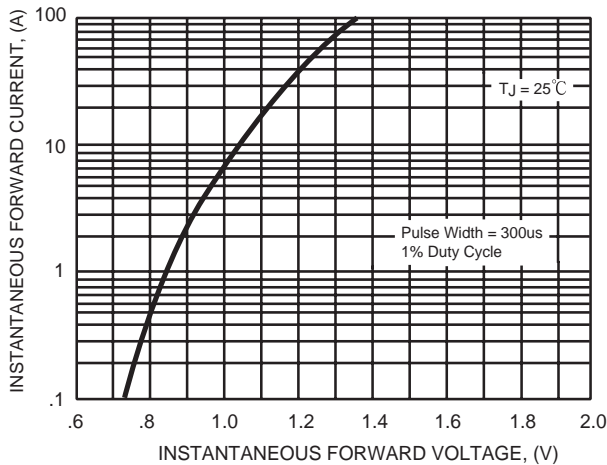


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

