



### 4.0 AMP GLASS PASSIVATED BRIDGE RECTIFIER - 50V-1000V

### RS-4L PACKAGE

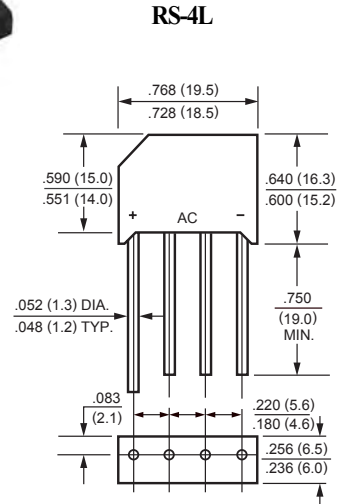
#### FEATURES

- \* Ideal for printed circuit board
- \* Surge overload rating: 150 amperes peak
- \* Mounting position: Any
- \* Weight: 5.15 grams
- \* Molded structure
- \* RoHS product for packing code suffix "G"
- \* Halogen free product for packing code suffix "H"
- \* **Moisture Sensitivity Level 1**



#### MECHANICAL DATA

- \* UL listed the recognized component directory, file #E195711
- \* Epoxy: Device has UL flammability classification 94V-0



Dimensions in inches and (millimeters)

#### 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%.

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

RATINGS	SYMBOL	RS401L	RS402L	RS403L	RS404L	RS405L	RS406L	RS407L	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input 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 Output Current TA = 50°C	I <sub>O</sub>	4.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	150							Amps
Typical Thermal Resistance from junction to case (Note 2)	R <sub>θJC</sub>	10							°C/W
Typical Thermal Resistance from junction to ambient	R <sub>θJA</sub>	28							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to + 150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150							°C
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	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	V <sub>F</sub>	1.1							Volts
Maximum Reverse Current at Rated Dc Blocking Voltage per element	@ TA = 25°C	5							uAmps
	@ TA = 100°C	1							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.  
2. Power dissipation: 4.4Wats



## RATING AND CHARACTERISTIC CURVES ( RS401L THRU RS407L )

FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

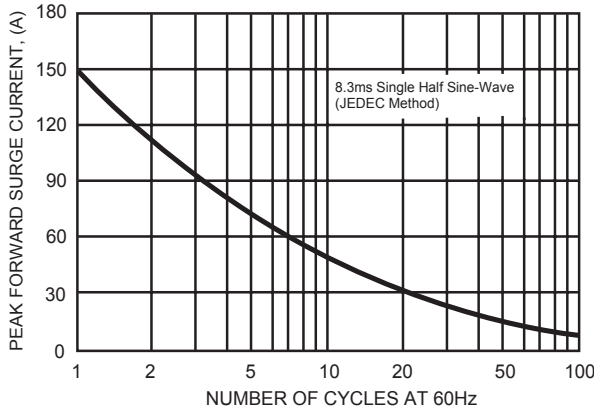


FIG. 2 - TYPICAL FORWARD CURRENT DERATING CURVE

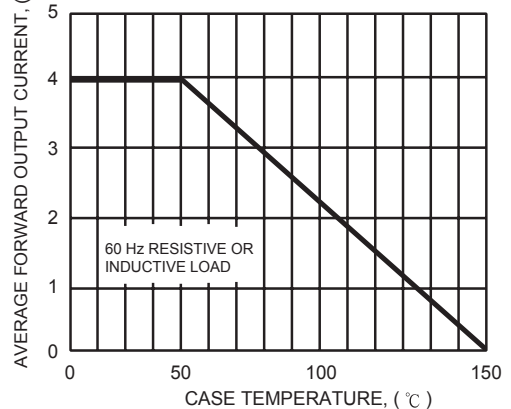


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

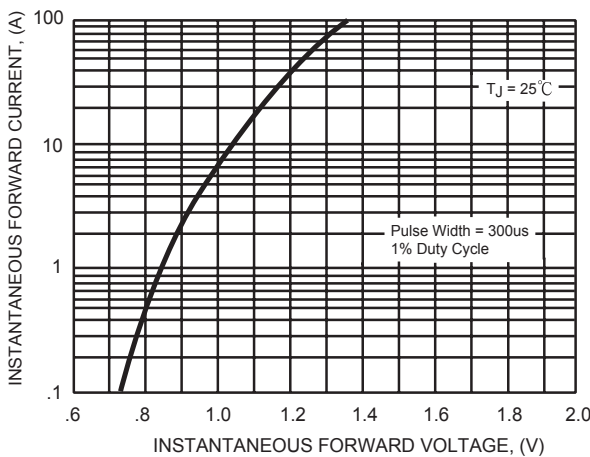
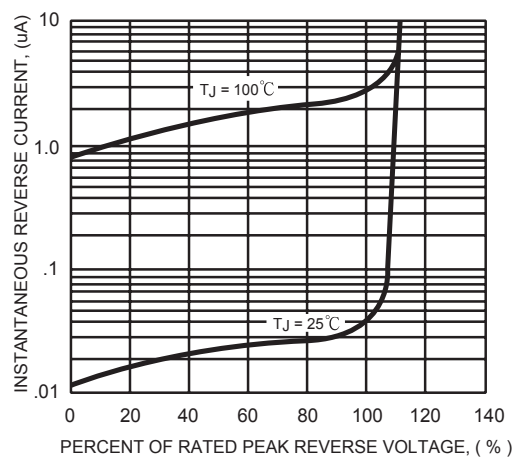


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS





# WILLAS



**RS401L  
THRU  
RS407L**

**4.0 AMP GLASS PASSIVATED BRIDGE RECTIFIER - 50V-1000V**

**RS-4L PACKAGE**

## Ordering Information:

Device PN	Packing
Part Number-G <sup>(1)</sup> -WS	Bulk: 400pcs/Box

Note: (1) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

### **\*\*\*Disclaimer\*\*\***

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