RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

RS401L THRU RS407L

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 4.0 Amperes

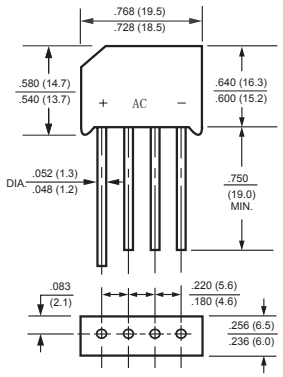
FEATURES

* 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-O

RS-4L



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 (@ T_A=25 °C unless otherwise noted)

RATINGS	SYMBOL	RS401L	RS402L	RS403L	RS404L	RS405L	RS406L	RS407L	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_A = 50°C	I_O	4.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150							Amps
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	10							°C/W
	$R_{\theta JA}$	28							
Typical Junction Capacitance (Note 3)	C_J	40							pF
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150							°C

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

CHARACTERISTICS		SYMBOL	RS401L	RS402L	RS403L	RS404L	RS405L	RS406L	RS407L	UNITS
Maximum Instantaneous Forward Voltage at 4.0A DC		V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T_A = 25°C	I_R	2.0							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. Measureed at 1MHz and applied reverse voltage of 4.0 volts.

2014-08
REV: A

RATING AND CHARACTERISTICS CURVES (RS401L THRU RS407L)

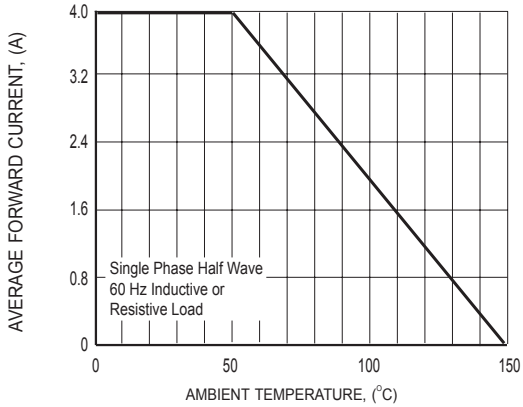


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

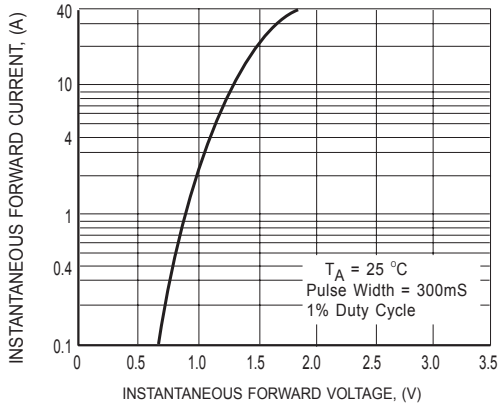


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

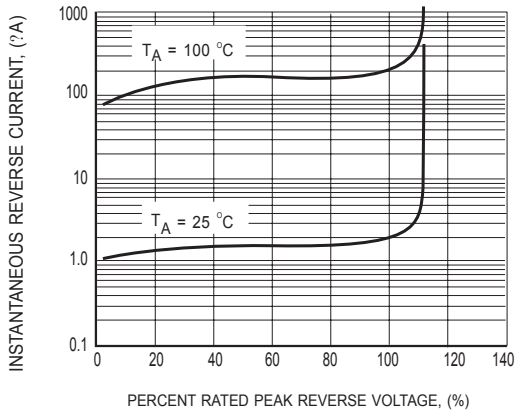


FIG.3 TYPICAL REVERSE CHARACTERISTICS

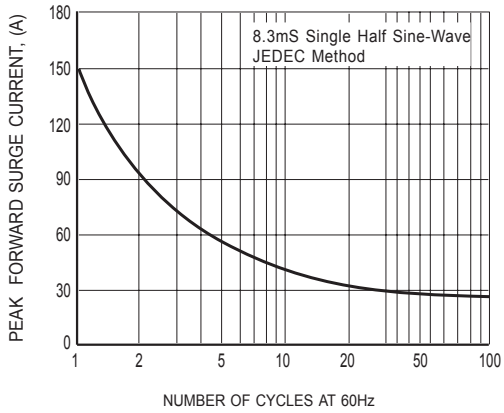
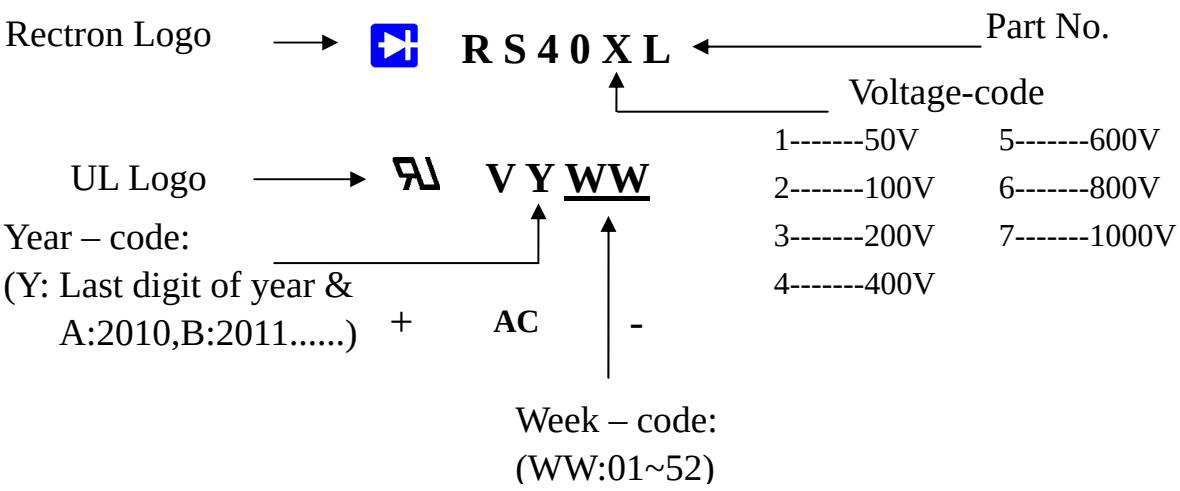


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

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-4L	-B	300	230*162*52	502*251*126	1,800	11.3

TUBE PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	WEIGHT(Kg)
RS-4L	-C	750	540*118*118	560*259*144	1,500	12.1

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