

**SINGLE-PHASE GLASS PASSIVATED  
SILICON BRIDGE RECTIFIER**  
VOLTAGE RANGE 50 to 1000 Volts CURRENT 6.0 Amperes

**FEATURES**

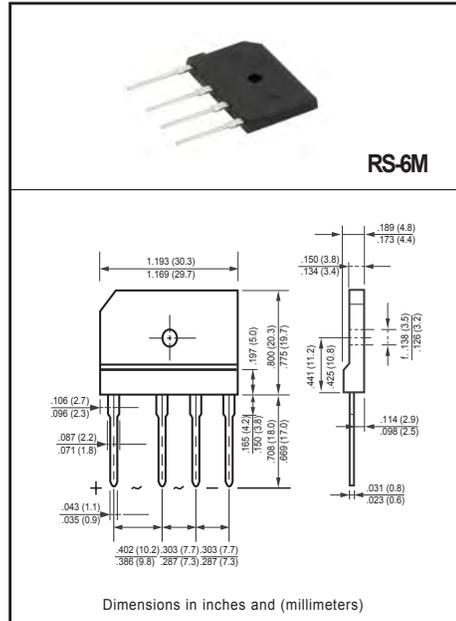
- \* Low leakage
- \* Low forward voltage
- \* Low cost
- \* Mounting position: Any

**MECHANICAL DATA**

- \* Epoxy: Device has UL flammability classification 94V-O
- \* UL list the recognized component directory, file #E94233

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
resistive or inductive load.



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

RATINGS	SYMBOL	RS601M	RS602M	RS603M	RS604M	RS605M	RS606M	RS607M	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>C</sub> = 100 °C (with heat sink)	I <sub>O</sub>	6.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	150							Amps
Current Squared Time	I <sup>2</sup> T	93.3							A <sup>2</sup> /Sec
Typical Thermal Resistance (Note 1)	R <sub>θJC</sub>	3.5							°C/W
	R <sub>θJA</sub>	26							
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150							°C

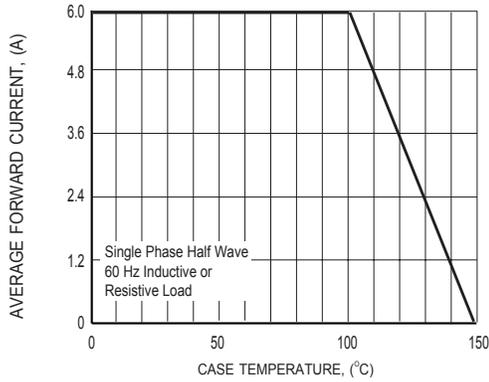
ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)

CHARACTERISTICS	SYMBOL	RS601M	RS602M	RS603M	RS604M	RS605M	RS606M	RS607M	UNITS
Maximum Instantaneous Forward Voltage at 6.0A 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							uAmps
	@T <sub>A</sub> = 125°C	300							

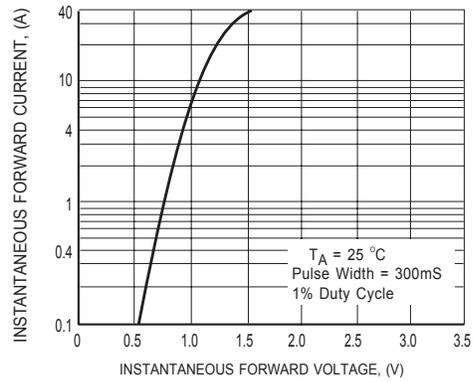
NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.  
2. \*Fully ROHS compliant\*, \*\*100% Sn plating (Pb-free)\*.

2010-01  
REV:A

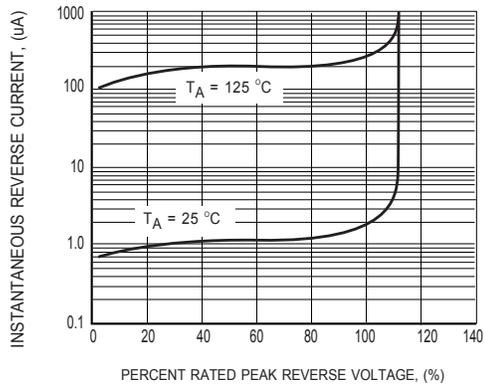
## RATING AND CHARACTERISTICS CURVES ( RS601M THRU RS607M )



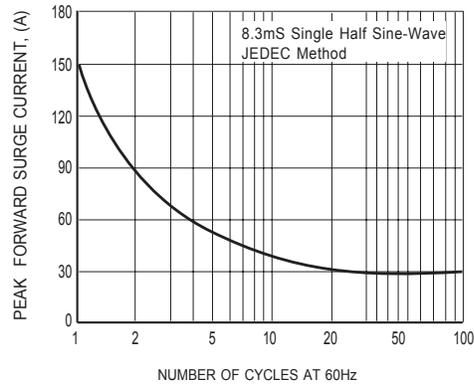
**FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

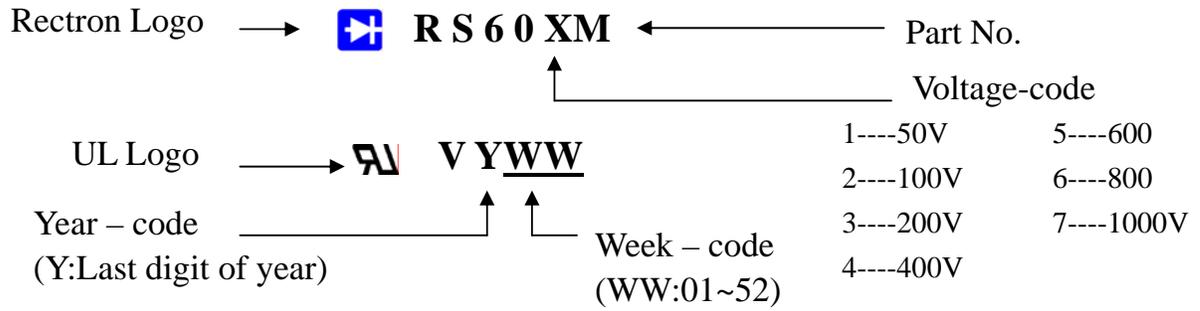


**FIG.3 TYPICAL REVERSE CHARACTERISTICS**



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

## Marking Description



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 **RECTRON**

## 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-6M	-B	300	230*190*46	410*243*157	1,800	13.37

### TUBE PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	WEIGHT(Kg)
RS-6M	-C	600	490*135*110	510*293*131	1,200	13.12



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