

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

**FEATURES**

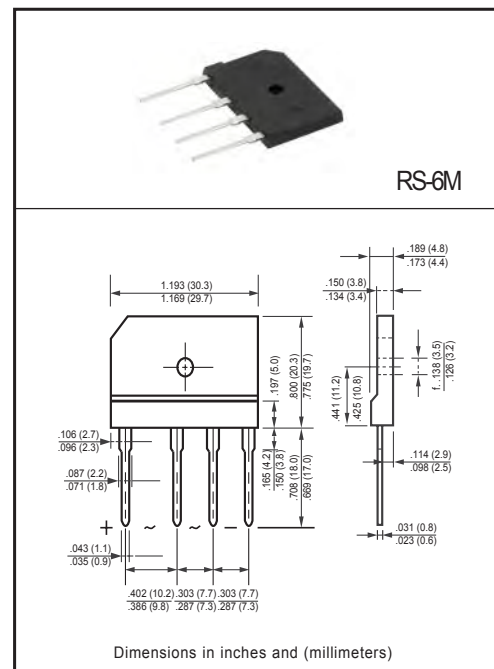
- \* Low leakage
- \* Low forward voltage
- \* Low cost
- \* Mounting position: Any

**MECHANICAL DATA**

- \* Epoxy: Device has UL flammability classification 94V-0
- \* 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	$V_{RRM}$	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 $T_C = 100\text{ }^\circ\text{C}$ (with heat sink)	$I_O$	6.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	150							Amps
Current Squared Time	$I^2T$	93.3							$\text{A}^2/\text{Sec}$
Insulation voltage	Viso	3000							Volts
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	3.5							$^\circ\text{C}/\text{W}$
	$R_{\theta JA}$	26							
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to + 150							$^\circ\text{C}$

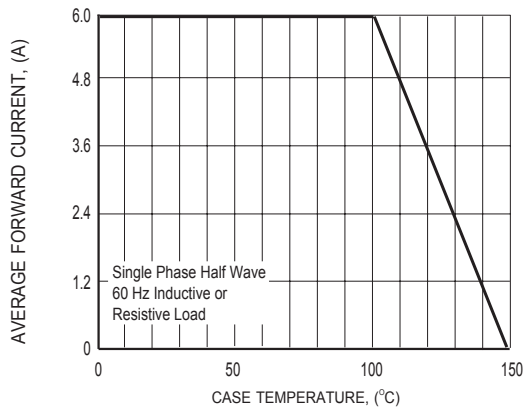
**ELECTRICAL CHARACTERISTICS (@ TA=25 °C unless otherwise noted)**

CHARACTERISTICS	SYMBOL	RS601M	RS602M	RS603M	RS604M	RS605M	RS606M	RS607M	UNITS
Maximum Instantaneous Forward Voltage at 6.0A DC	$V_F$	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25\text{ }^\circ\text{C}$	5.0							uAmps
	@ $T_A = 125\text{ }^\circ\text{C}$	200							

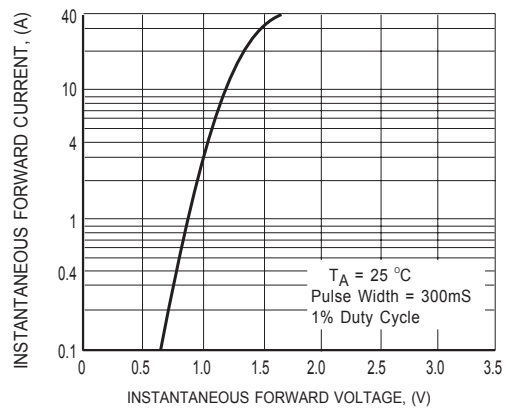
NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.  
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

2016-12  
REV:A

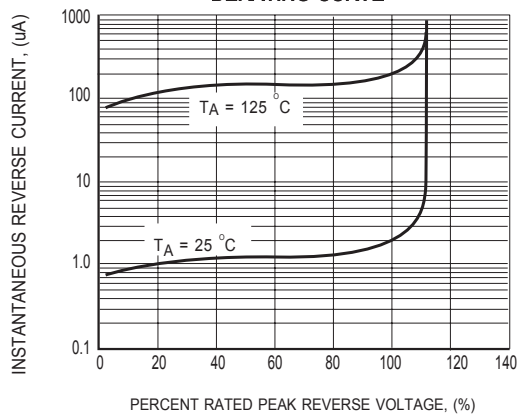
## RATING AND CHARACTERISTICS CURVES ( RS601M THRU RS607M )



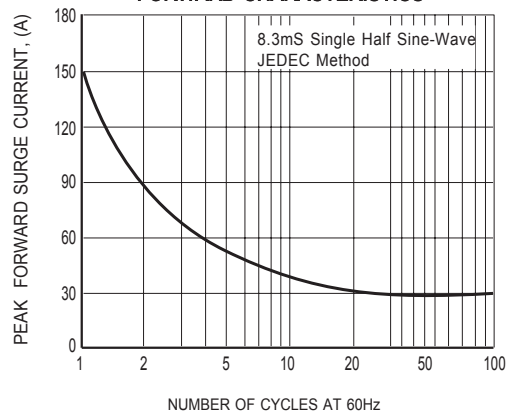
**FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

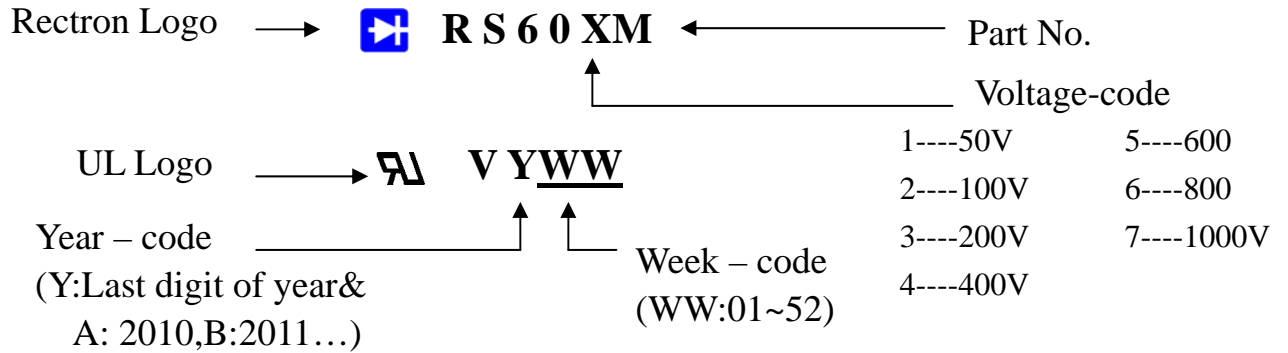


**FIG.3 TYPICAL REVERSE CHARACTERISTICS**



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

## Marking Description



## 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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