



**THE DATASHEET OF  
RS1005M-C-LV**



**SINGLE-PHASE GLASS PASSIVATED  
SILICON BRIDGE RECTIFIER**  
VOLTAGE RANGE 50 to 600 Volts CURRENT 10 Amperes

**FEATURES**

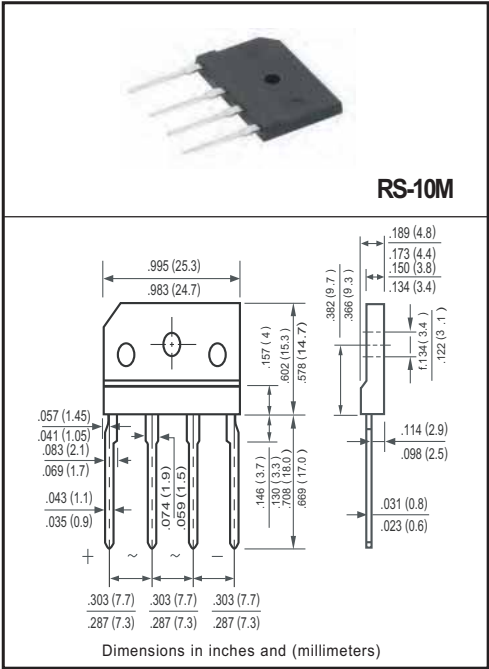
- \* Low leakage
- \* Low forward voltage
- \* Mounting position : Any
- \* Surge overload rating: 200 Amperes peak
- \* Ideal for printed circuit boards
- \* MSL: Level 1

**MECHANICAL DATA**

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

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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



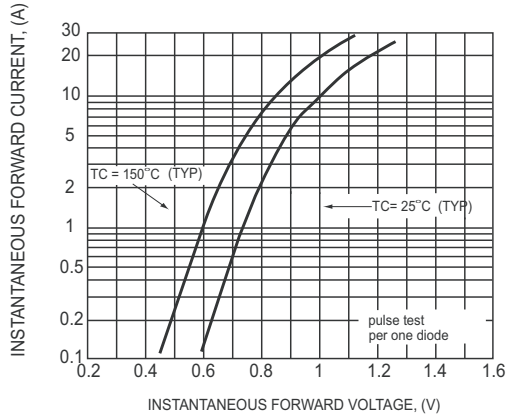
**MAXIMUM CHARACTERISTICS ( @ TA = 25°C unless otherwise noted )**

CHARACTERISTICS	SYMBOL	RS1001M	RS1002M	RS1003M	RS1004M	RS1005M	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	Volts
Maximum RMS Bridge Input Voltage	V <sub>RMS</sub>	35	70	140	280	420	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	Volts
Maximum Average Forward Rectified Output Current at T <sub>c</sub> =100 degree with heatsink	I <sub>o</sub>	10					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	200					Amps
Typical Current Square Time	I <sup>2</sup> T	165.9					A <sup>2</sup> S
Insulation voltage	V <sub>iso</sub>	3000					Volts
Typical Thermal Resistance from junction to ambient	R <sub>θJA</sub>	22					°C/W
Typical Thermal Resistance from junction to case	R <sub>θJC</sub>	1.0					
Operating and Storage Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to + 150					°C

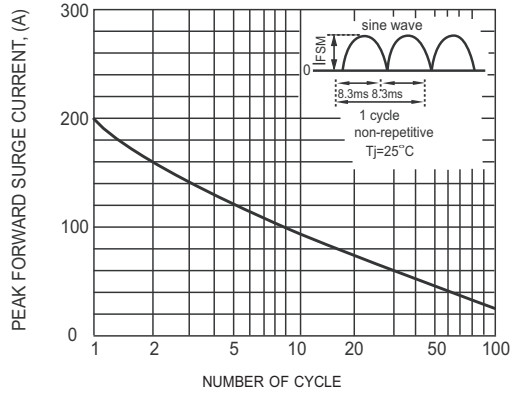
**ELECTRICAL CHARACTERISTICS ( @ TA = 25°C unless otherwise noted )**

CHARACTERISTICS	SYMBOL	RS1001M	RS1002M	RS1003M	RS1004M	RS1005M	UNITS
Maximum Forward Voltage Drop per element at 5.0A DC	V <sub>F</sub>	0.9					Volts
Maximum Reverse Current at Rated DC Blocking Voltage per element	@TA=25 °C	5.0					μAmps
	@TA=150 °C	1.0					mAmps

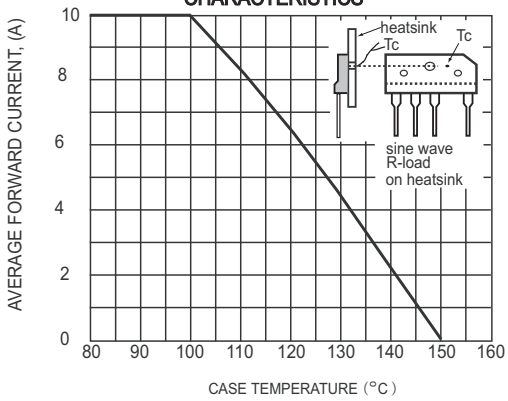
# RATING AND CHARACTERISTICS CURVES ( RS100xM-C-LV )



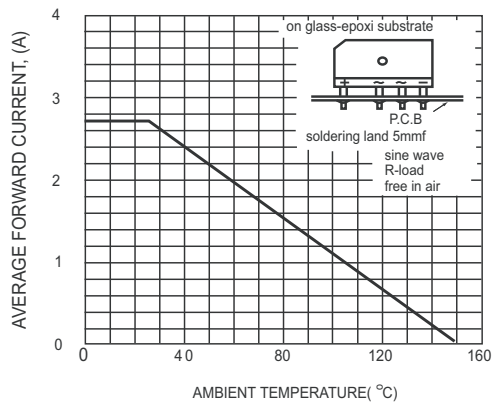
**FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



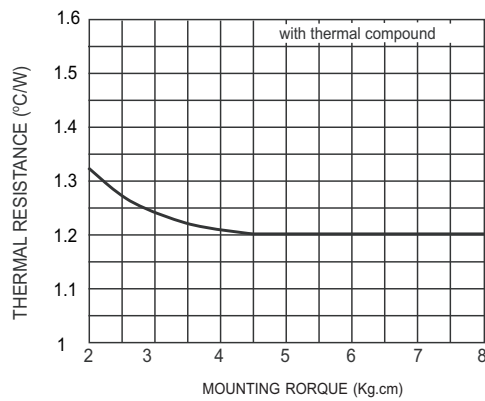
**FIG.2 SURGE FORWARD CURRENT CAPABILITY**



**FIG.3 TYPICAL FORWARD CURRENT DERATING CURVE**

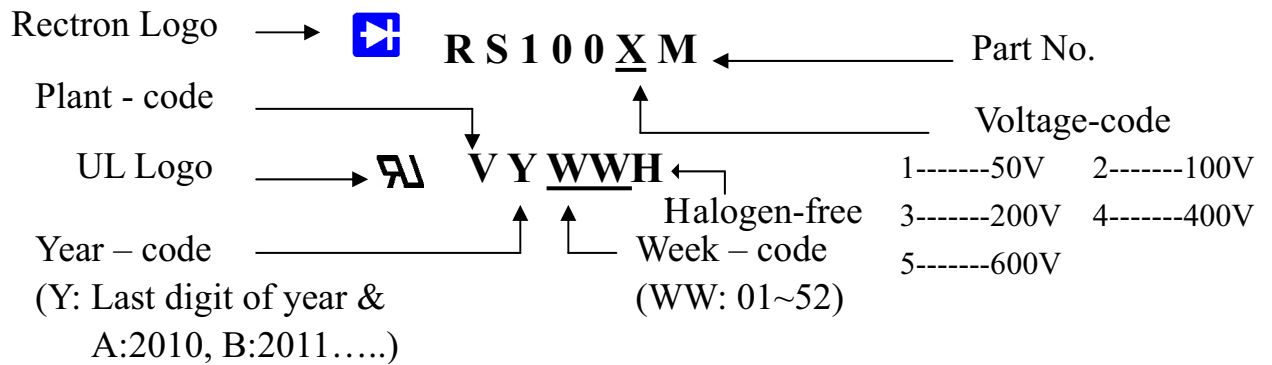


**FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG.5 CONTACT THERMAL RESISTANCE**

## Marking Description



# PACKAGING OF DIODE AND BRIDGE RECTIFIERS

## TUBE PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	WEIGHT(Kg)
RS-4M/-10M	-C	900	540*118*118	560*259*144	1,800	12.82



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