RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

RS1001M THRU RS1007M

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 10 Amperes

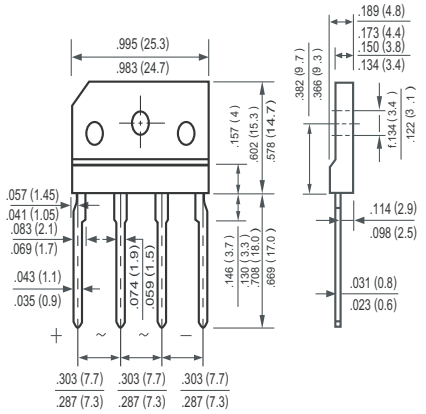
FEATURES

* Low leakage
* Low forward voltage
* Mounting position : Any
* Surge overload rating: 200 Amperes peak
* Ideal for printed circuit boards
* MSL: Level 2

MECHANICAL DATA

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

RS-10M



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

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

CHARACTERISTICS	SYMBOL	RS1001M	RS1002M	RS1003M	RS1004M	RS1005M	RS1006M	RS1007M	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input 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 Output Current at Tc=100 degree with heatsink	I_O	10							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	200							Amps
Typical Current Square Time	I^2T	165.9							A^2S
Typical Thermal Resistance from junction to ambient	$R_{\theta JA}$	22							°C/W
Typical Thermal Resistance from junction to case	$R_{\theta JC}$	1.0							
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to + 150							°C

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

CHARACTERISTICS		SYMBOL	RS1001M	RS1002M	RS1003M	RS1004M	RS1005M	RS1006M	RS1007M	UNITS
Maximum Forward Voltage Drop per element at 5.0A DC		V_F	1.1							Volts
Maximum Reverse Current at Rated DC Blocking Voltage per element	@TA=25 °C	IR	5.0							µAmps
	@TC=100 °C		0.2							mAmps

Note: "Fully ROHS compliant", "100% Sn plating (Pb-free)".

2014-09
REV: A

RATING AND CHARACTERISTICS CURVES (RS1001M THRU RS1007M)

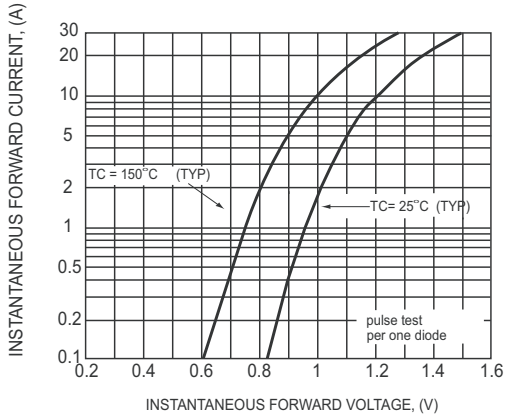


FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

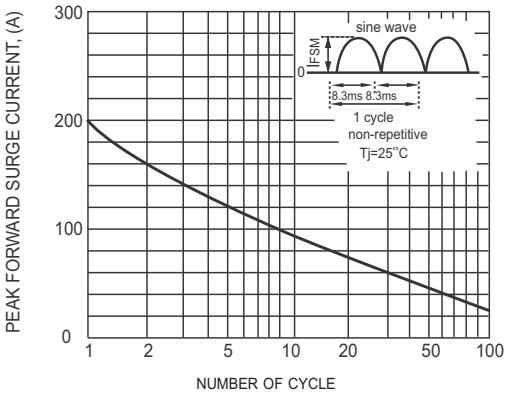


FIG.2 SURGE FORWARD CURRENT CAPABILITY

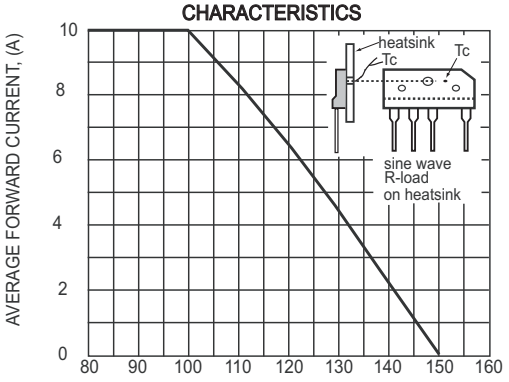


FIG.3 TYPICAL FORWARD CURRENT DERATING CURVE

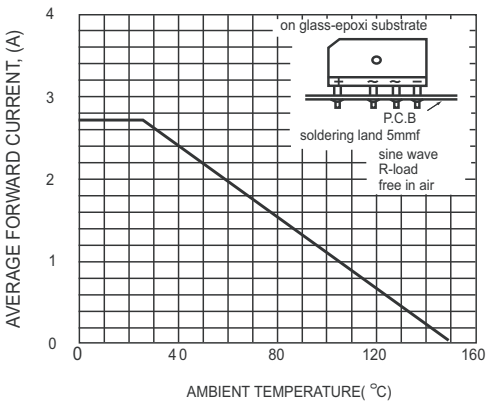


FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

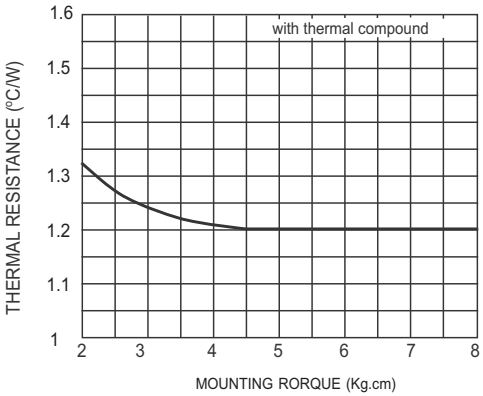
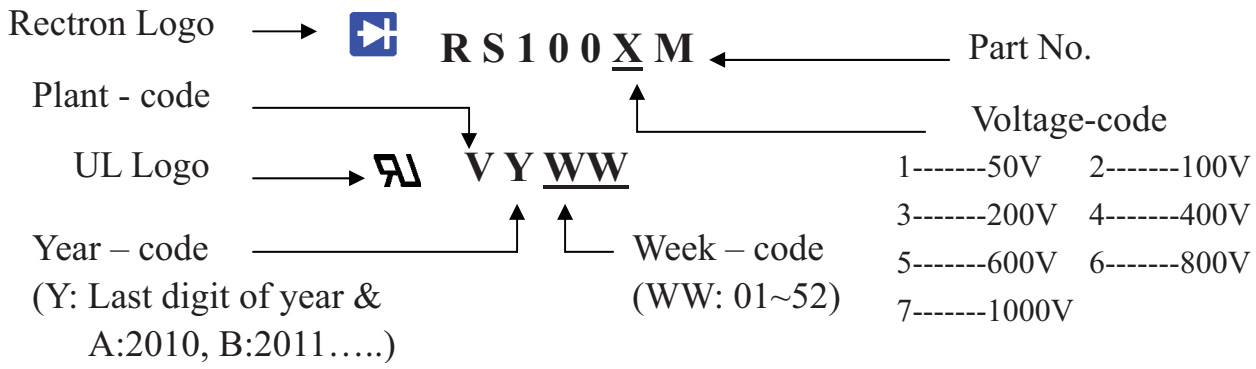


FIG.5 CONTACT THERMAL RESISTANCE

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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