RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

RS2508M

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

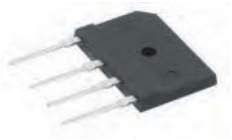
VOLTAGE RANGE 1200 Volts CURRENT 25 Amperes

FEATURES

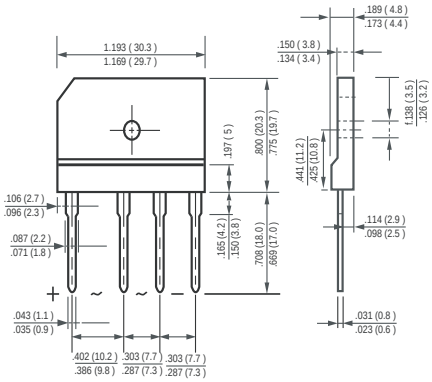
* Low leakage
* Low forward voltage
* Mounting position: Any
* Surge overload rating: 300 amperes peak
* Ideal for printed cikcuit boakds
* High forward surge current capability

MECHANICAL DATA

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



RS-25M



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.

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

RATINGS		SYMBOL	RS2508M	UNITS
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	1200	Volts
Maximum RMS Voltage		V_{RMS}	840	Volts
Maximum DC Blocking Voltage		V_{DC}	1200	Volts
Maximum Average Forward Rectified Current at T_C=55°C	with heatsink	I_O	25	Amps
	without heatsink		4.3	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	300	Amps
Typical Current Squared Time		I^2t	373.3	A^2S
Insulation voltage		Viso	3000	Volts
Typical Thermal Resistance (Note 1)		$R_{\Theta JC}$	1.0	°C/W
Typical Thermal Resistance (Note 1)		$R_{\Theta JA}$	22	°C/W
Operating Temperature Range		T_J	150	°C
Storage Temperature Range		T_{STG}	-55 to + 150	°C

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

CHARACTERISTICS		SYMBOL	RS2508M	UNITS
Maximum Forward Voltage at 12.5A DC		V_F	1.05	Volts
Maximum DC Average Reverse Current at Rated DC Blocking Voltage	@TA = 25°C	I_R	0.5	uAmps
	@TA = 125°C		200	uAmps

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

2017-11
REV:O

RATING AND CHARACTERISTICS CURVES (RS2508M)

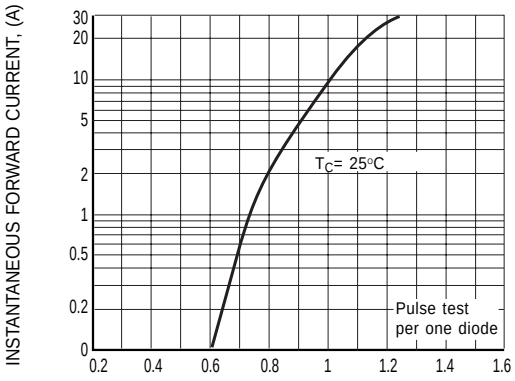


FIG.1 MAXIMUM INSTANTANEOUS FORWARD CHARACTERITICS

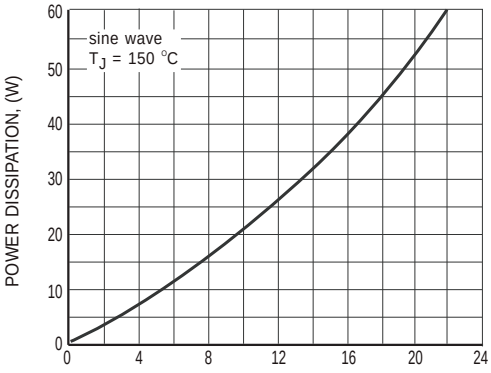


FIG.2 POWER DISSIPATION

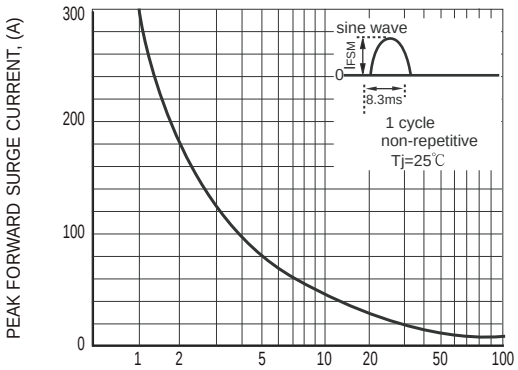


FIG.3 SURGE FORWARD CURRENT CAPABILITY

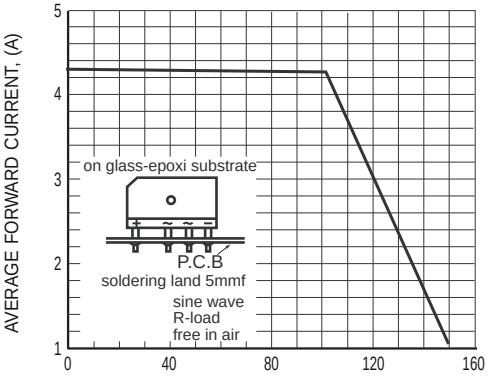


FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

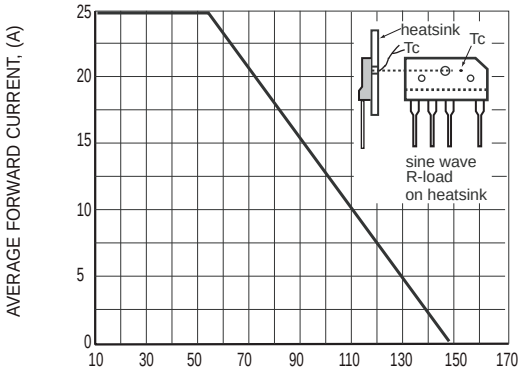


FIG.5 TYPICAL FORWARD CURRENT DERATING CURVE

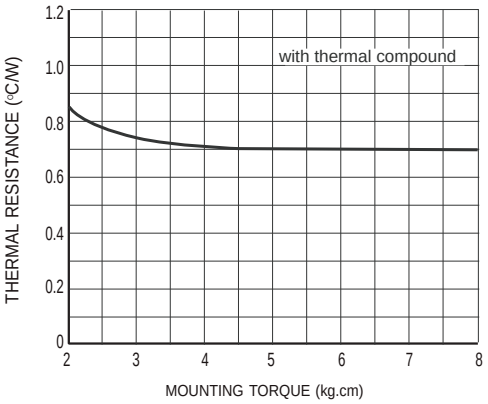
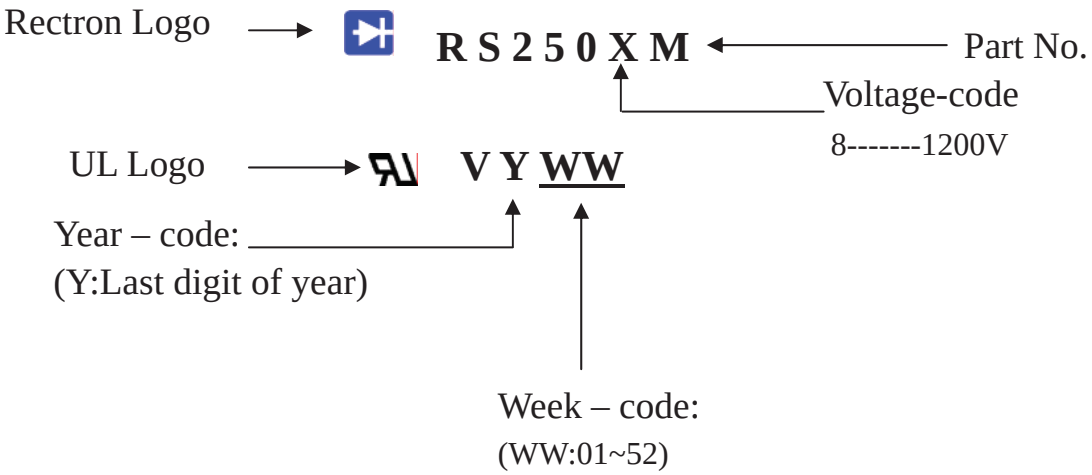


FIG.6 CONTACT THERMAL RESISTANCE fcf

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-25M	-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-25M	-C	600	490*135*110	510*293*131	1,200	13.12

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