

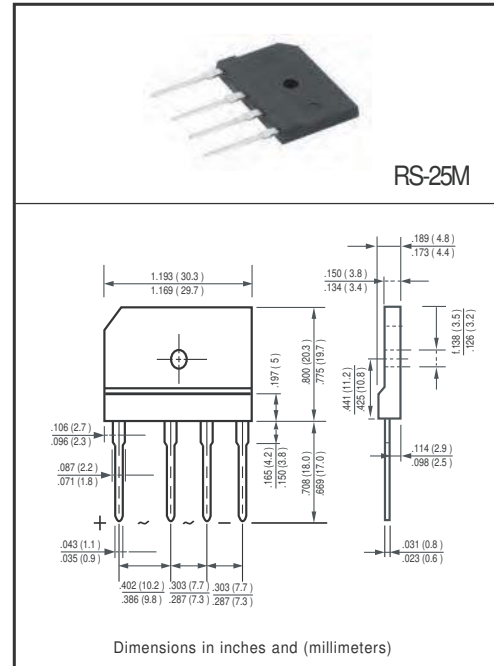
**SINGLE-PHASE GLASS PASSIVATED  
SILICON BRIDGE RECTIFIER**  
VOLTAGE RANGE 1200 Volts CURRENT 25 Amperes

**FEATURES**

- \* Low leakage
- \* Low forward voltage
- \* Mounting position: Any
- \* Surge overload rating: 300 amperes peak
- \* Ideal for printed circuit boards
- \* High forward surge current capability

**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.  
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 $T_C=55^\circ\text{C}$	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		$I_t^2$	373.3	$\text{A}^2\text{S}$
Insulation voltage		$V_{iso}$	3000	Volts
Typical Thermal Resistance (Note 1)		$R_{\theta JC}$	1.0	$^\circ\text{C}/\text{W}$
Typical Thermal Resistance (Note 1)		$R_{\theta JA}$	22	$^\circ\text{C}/\text{W}$
Operating Temperature Range		$T_J$	150	$^\circ\text{C}$
Storage Temperature Range		$T_{STG}$	-55 to + 150	$^\circ\text{C}$

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	

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

2017-11  
REV:0

## RATING AND CHARACTERISTICS CURVES (RS2508M)

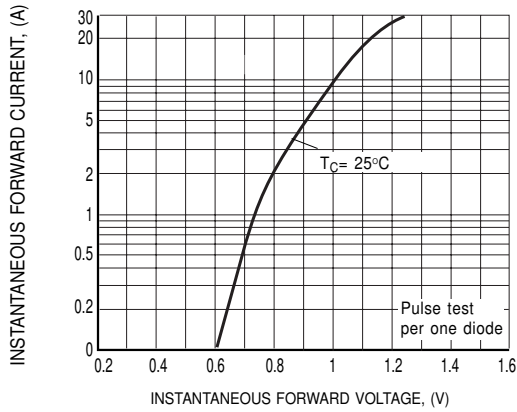


FIG.1 MAXIMUM INSTANTANEOUS FORWARD CHARACTERITICS

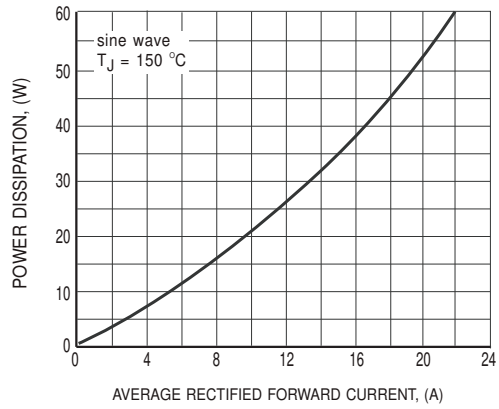


FIG.2 POWER DISSIPATION

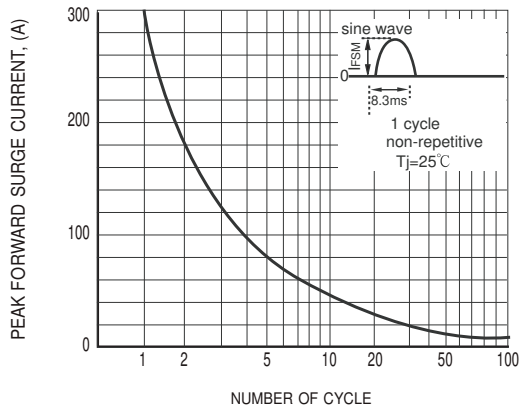


FIG.3 SURGE FORWARD CURRENT CAPABILITY

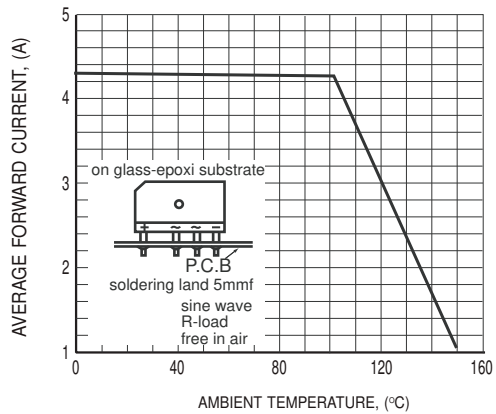


FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

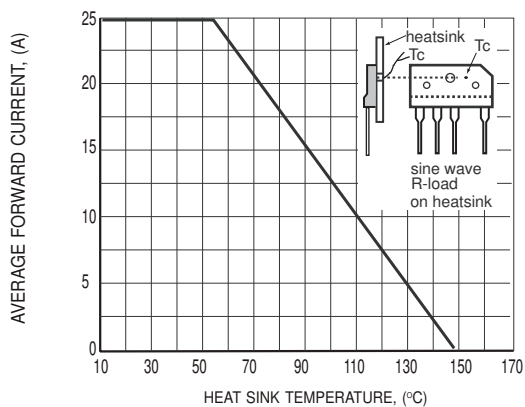


FIG.5 TYPICAL FORWARD CURRENT DERATING CURVE

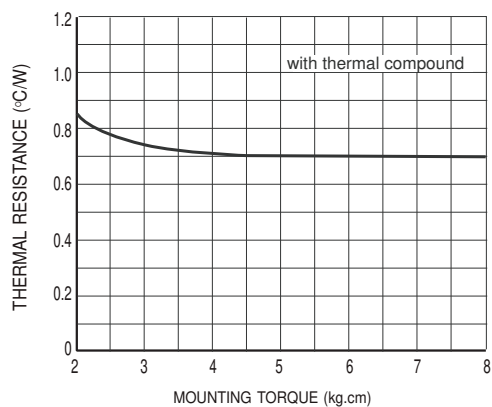
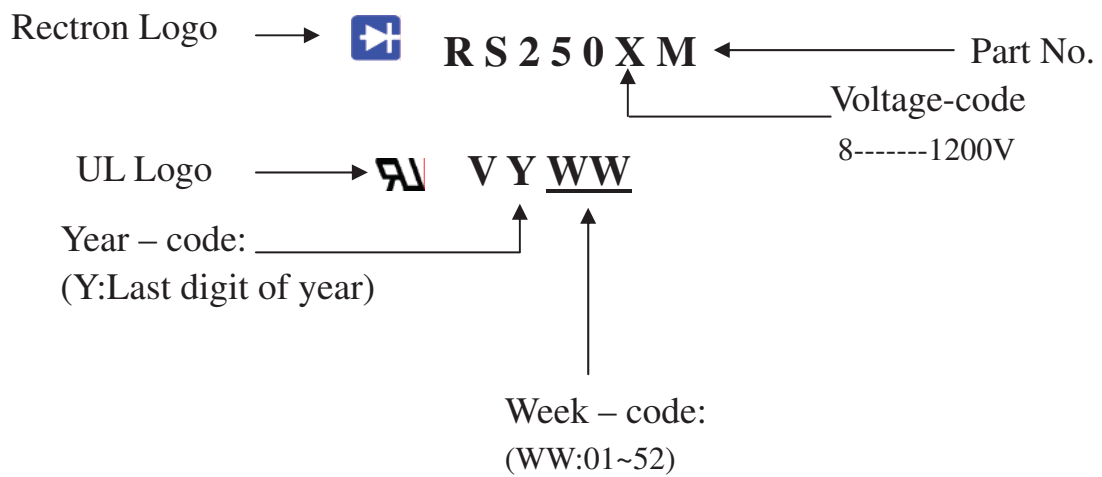


FIG.6 CONTACT THERMAL RESISTANCE  $f_{cf}$

## 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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