

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**
VOLTAGE RANGE 600 Volts CURRENT 25 Amperes

FEATURES

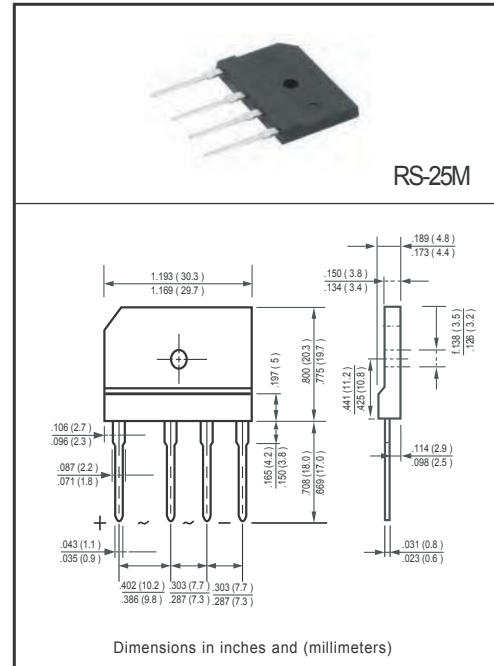
- * Low leakage
- * Low forward voltage
- * Mounting position: Any
- * Surge overload rating: 300 amperes peak
- * Ideal for printed circuit boards
- * High forward surge current capability

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-O
- * 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	RS2505M-C-LV	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	Volts
Maximum RMS Voltage	V_{RMS}	420	Volts
Maximum DC Blocking Voltage	V_{DC}	600	Volts
Maximum Average Forward Rectified Current at $T_C=55^{\circ}C$	I_O	25 4.3	Amps
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	V_{iso}	3000	Volts
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	1.0	$^{\circ}C/W$
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	22	$^{\circ}C/W$
Operating Temperature Range	T_J	150	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55 to + 150	$^{\circ}C$

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

CHARACTERISTICS	SYMBOL	RS2505M-C-LV	UNITS
Maximum Forward Voltage at 12.5A DC	V_F	0.92	Volts
Maximum DC Average Reverse Current at @TA = 25°C	I_R	5.0	uAmps
Rated DC Blocking Voltage		200	uAmps

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

2016-12
REV:O

RATING AND CHARACTERISTICS CURVES (RS2505M-C-LV)

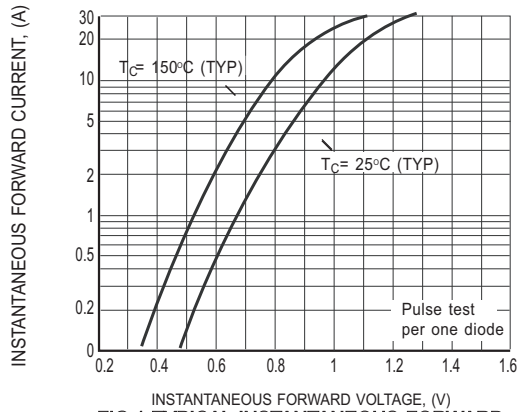


FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

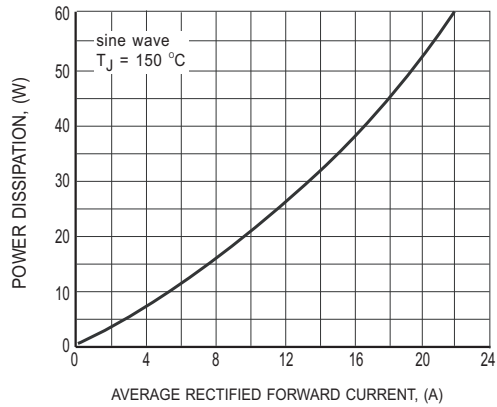


FIG.2 POWER DISSIPATION

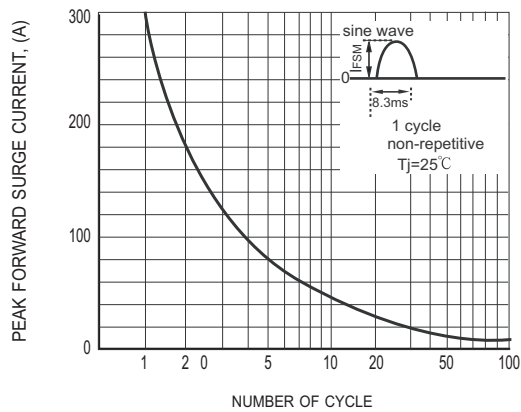


FIG.3 SURGE FORWARD CURRENT CAPABILITY

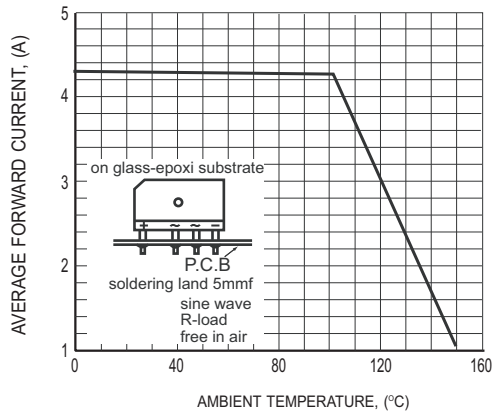


FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

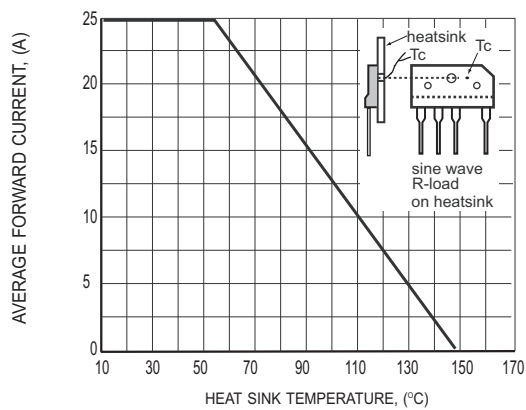


FIG.5 TYPICAL FORWARD CURRENT DERATING CURVE

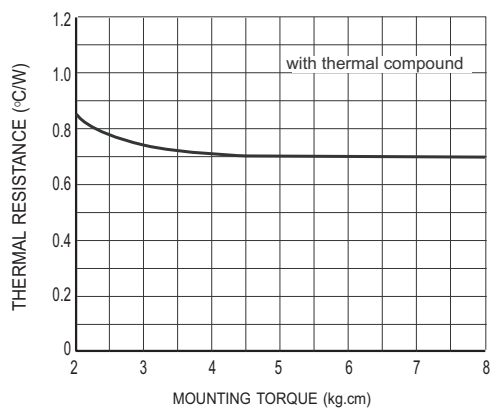
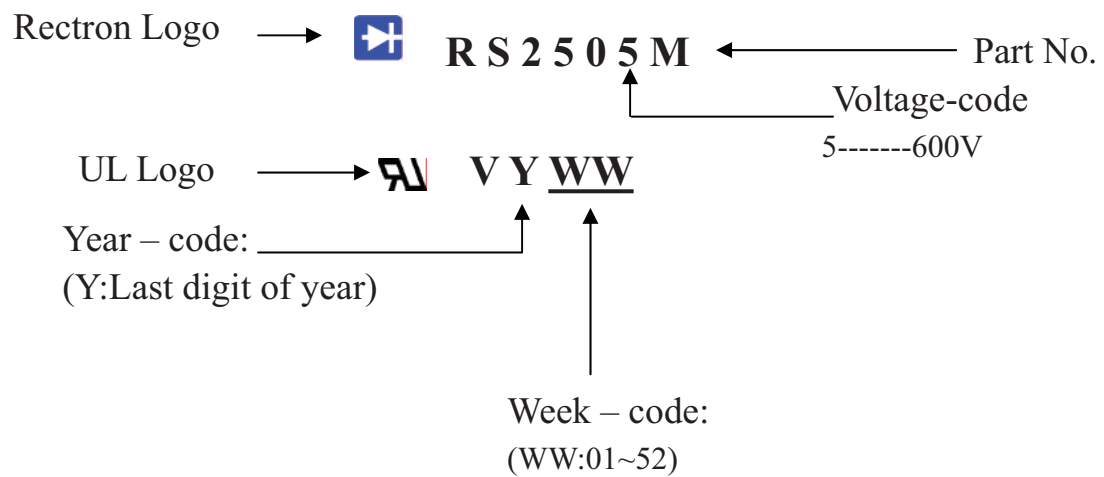


FIG.6 CONTACT THERMAL RESISTANCE for

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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