

**SINGLE-PHASE GLASS PASSIVATED  
SILICON BRIDGE RECTIFIER**  
**VOLTAGE RANGE 600 Volts CURRENT 15 Amperes**

**FEATURES**

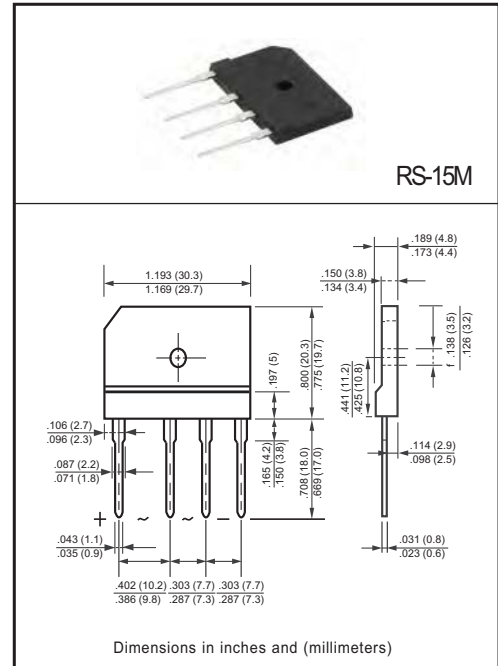
- \* Low leakage
- \* Low forward voltage
- \* Surge overload rating : 250 amperes peak
- \* Mounting position: Any
- \* Ideal for printed circuit boards
- \* High forward surge current capability

**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.  
resistive or inductive load.



MAXIMUM RATINGS: (at  $T_A = 25^\circ\text{C}$  unless otherwise noted)

RATINGS	SYMBOL	RS1505M-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 $T_C = 100^\circ\text{C}$	$I_O$	15	Amps
Insulation voltage	Viso	3000	Volts
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	250	Amps
Typical Current Squared Time	$I^2T$	259.3	$\text{A}^2\text{S}$
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	1.5	$^\circ\text{C/W}$
	$R_{\theta JA}$	22	
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to + 150	$^\circ\text{C}$

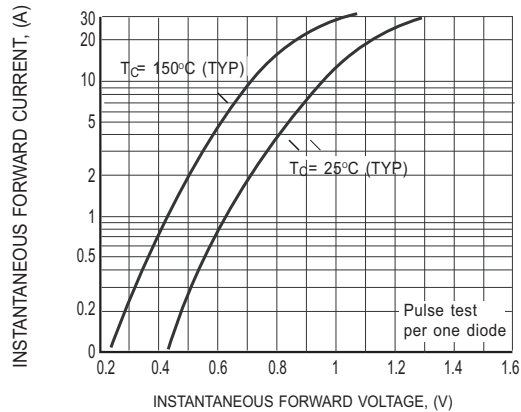
ELECTRICAL CHARACTERISTICS (at  $T_A = 25^\circ\text{C}$  unless otherwise noted)

CHARACTERISTICS	SYMBOL	RS1505M-C-LV	UNITS
Maximum Instantaneous Forward Voltage at 7.5A DC	$V_F$	0.9	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5.0	uAmps
		200	

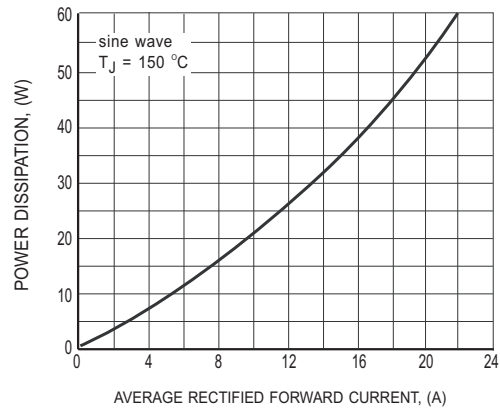
NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.  
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

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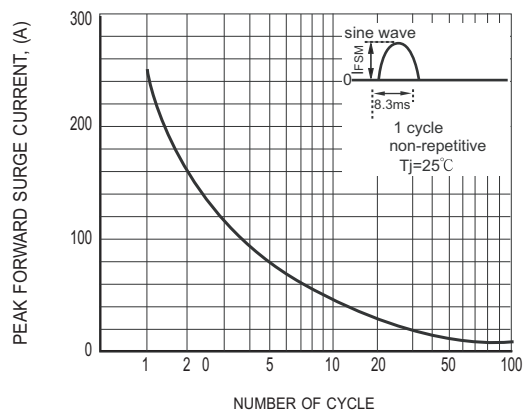
## RATING AND CHARACTERISTICS CURVES ( RS1505M -C-LV)



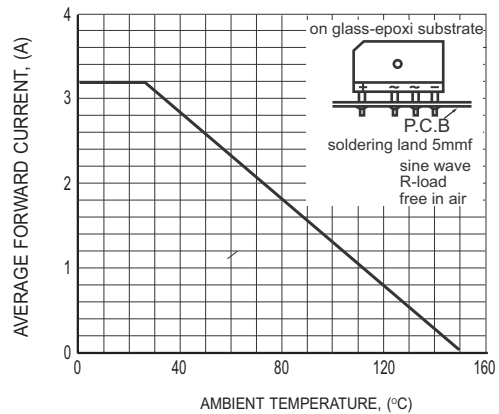
**FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



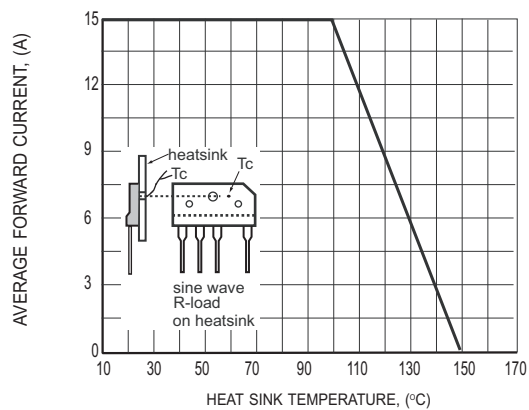
**FIG.2 POWER DISSIPATION**



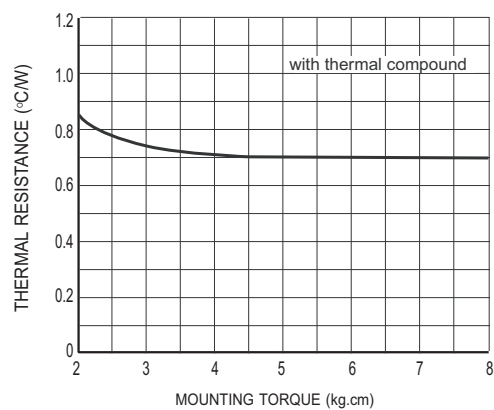
**FIG.3 SURGE FORWARD CURRENT CAPABILITY**



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

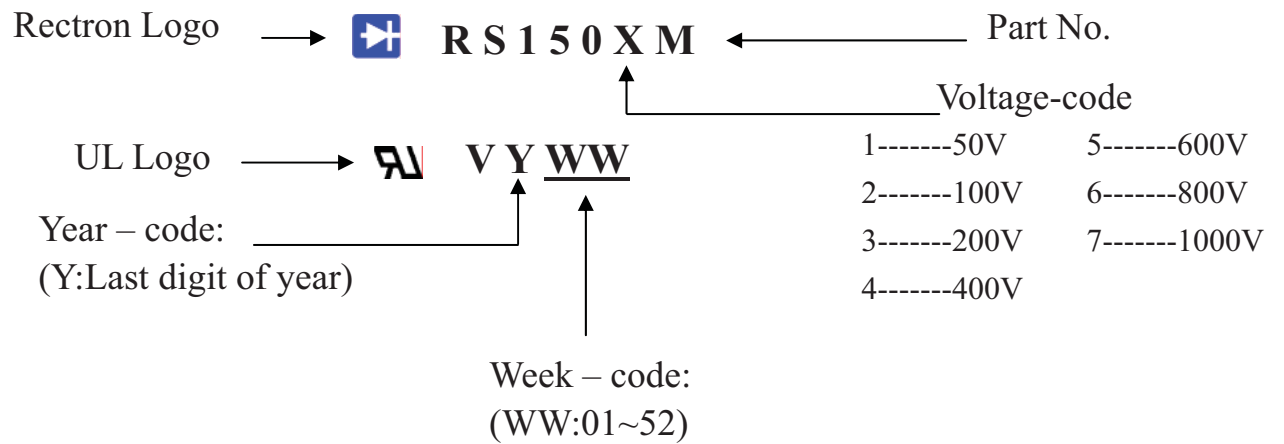


**FIG.5 TYPICAL FORWARD CURRENT DERATING CURVE**



**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-15M	-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-15M	-C	600	490*135*110	510*293*131	1,200	13.12

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