

RS3501M THRU RS3507M

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER VOLTAGE RANGE 50 to 1000 Volts CURRENT 35 Amperes

FEATURES

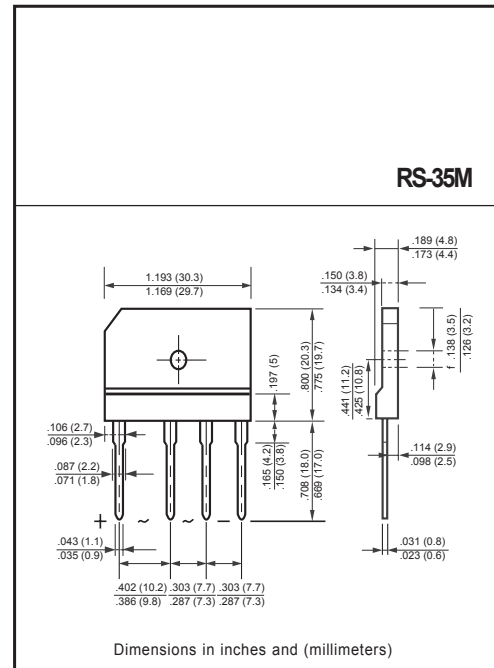
- * Low leakage
- * Low forward voltage
- * Surge overload rating : 300 amperes peak
- * Mounting position: Any
- * Ideal for printed circuit boards
- * High forward surge current capability

MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-O
- * UL list the recognized component directory, file #E252754

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



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

RATINGS	SYMBOL	RS3501M	RS3502M	RS3503M	RS3504M	RS3505M	RS3506M	RS3507M	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS 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 Current at $T_C = 55^\circ\text{C}$	I_O	35							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_t^2	373.3							A^2/S
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	1.0							$^\circ\text{C}/\text{W}$
	$R_{\theta JA}$	22							
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150							$^\circ\text{C}$

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

CHARACTERISTICS	SYMBOL	RS3501M	RS3502M	RS3503M	RS3504M	RS3505M	RS3506M	RS3507M	UNITS
Maximum Instantaneous Forward Voltage at 17.5A DC	V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25^\circ\text{C}$	5.0							uAmps
	@ $T_A = 125^\circ\text{C}$	200							

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

2010-01
REV:B

RATING AND CHARACTERISTICS CURVES (RS3501M THRU RS3507M)

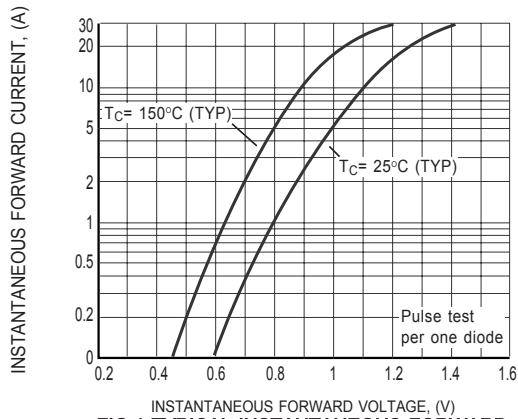


FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

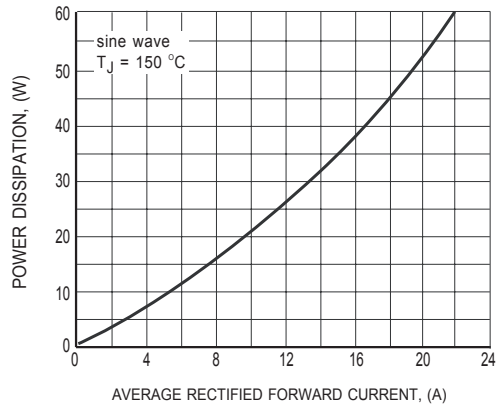


FIG.2 POWER DISSIPATION

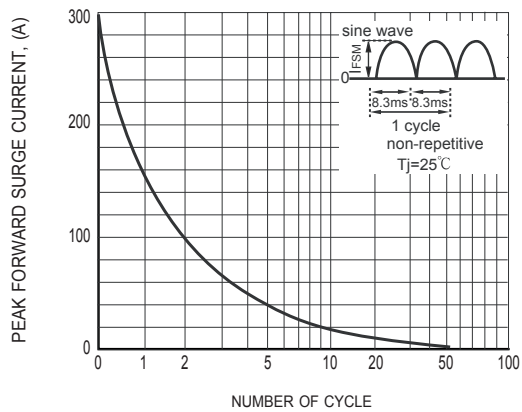


FIG.3 SURGE FORWARD CURRENT CAPABILITY

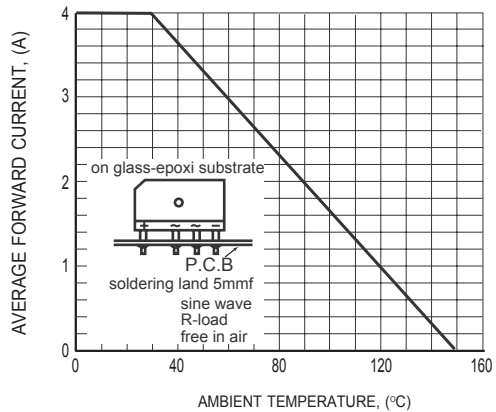


FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

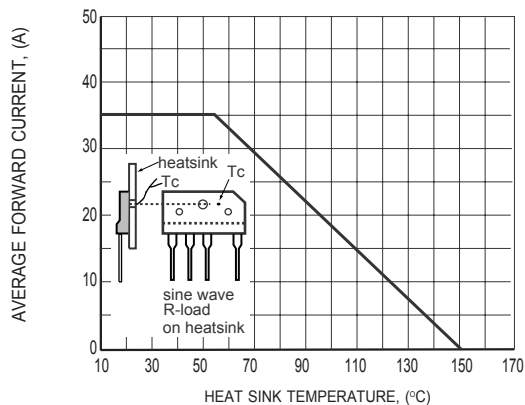


FIG.5 TYPICAL FORWARD CURRENT DERATING CURVE

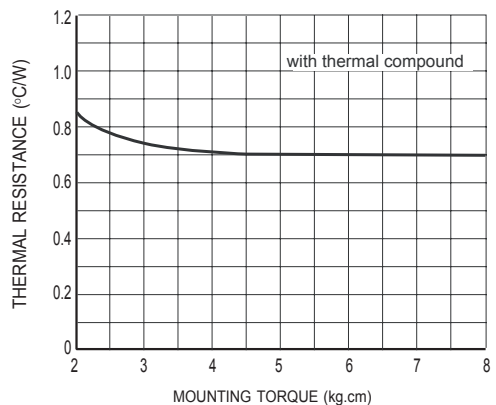
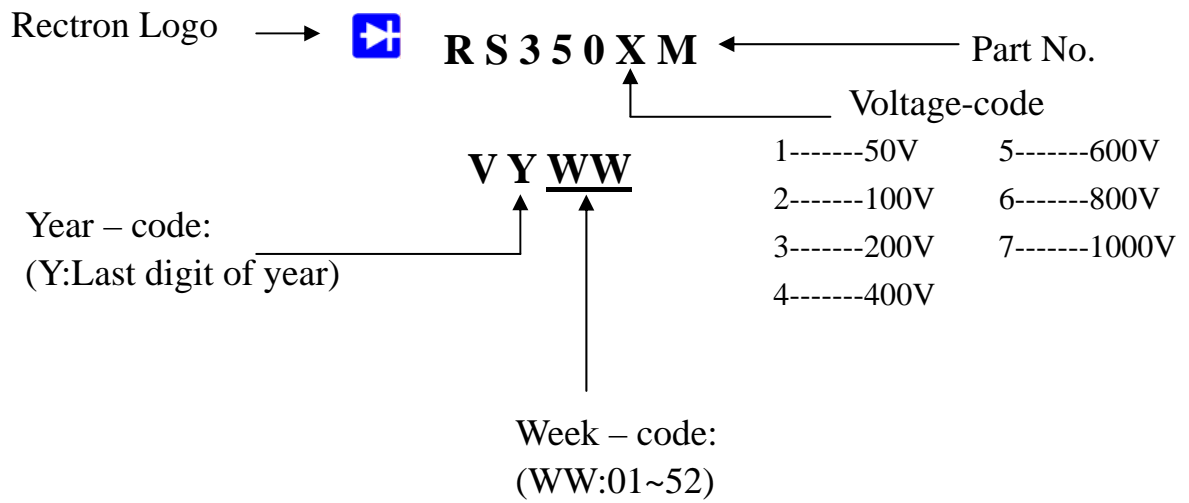


FIG.6 CONTACT THERMAL RESISTANCE for

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-35M	-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-35M	-C	600	490*135*110	510*293*131	1,200	13.12

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