RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

T6ARS3505M THRU T6ARS3507M

TRANSIENT VOLTAGE SUPPRESSORS
GPP BRIDGE RECTIFIER
VOLTAGE RANGE 600 to 1000 Volts CURRENT 35 Amperes

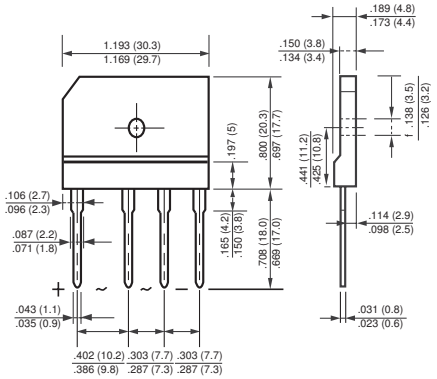
FEATURES

* 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 #E94233

RS-35M



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.
For capacitive load, derate current by 20%.

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

RATINGS	SYMBOL	T6ARS3505M	T6ARS3506M	T6ARS3507M	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	600	800	1000	Volts
Maximum Average Forward Rectified Current at T_C = 55°C (With Heat-sink)	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
Current Squarad Time	I^2T	373.3			A^2/Sec
Peak Power Dissipation at T_A=25°C,T_P=1mS (Note 1)	P_{PPM}	Maximum 600			Watts
Breakdown Voltage Range at I_T=1mA	V_{BR}	380 ~ 420			Volts
Maximum Peak Pulse Current	I_{PPM}	1.1			Amps
Maximum Clamping Voltage at I_{PPM} =1.1A	V_C	548			Volts
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150			°C

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

CHARACTERISTICS		SYMBOL	T6ARS3505M	T6ARS3506M	T6ARS3507M	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°C	I_R	5.0			uAmps
	@T_A = 100°C		200			

NOTES : 1. Non-repetitive current pulse, per Fig.8 and derated above T_A=25°C per Fig.7.
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".
3. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

2010-05
REV:O

RATING AND CHARACTERISTICS CURVES (T6ARS3505M THRU T6ARS3507M)

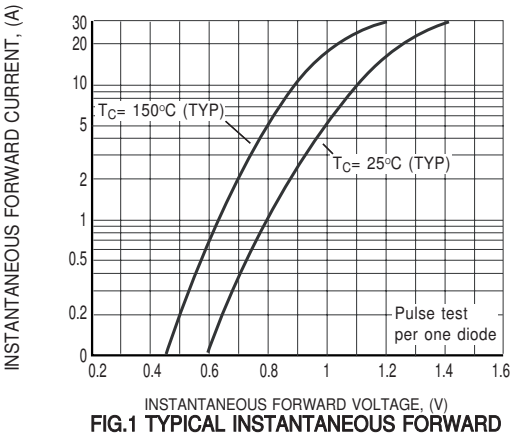


FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERITICS

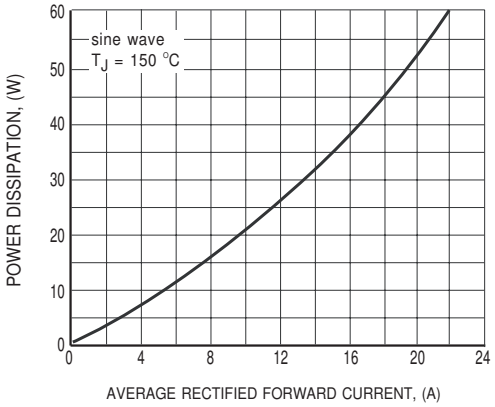


FIG.2 POWER DISSIPATION

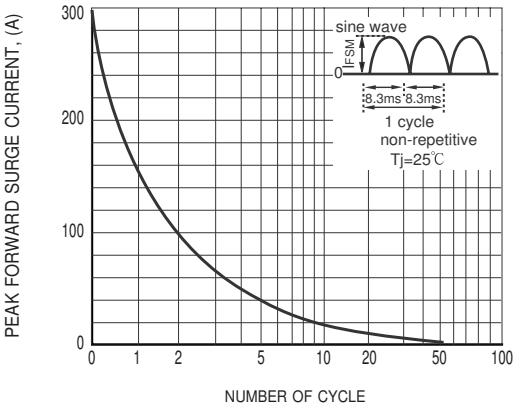


FIG.3 SURGE FORWARD CURRENT CAPABILITY

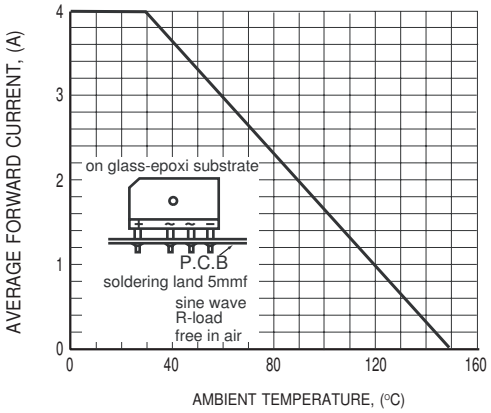


FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

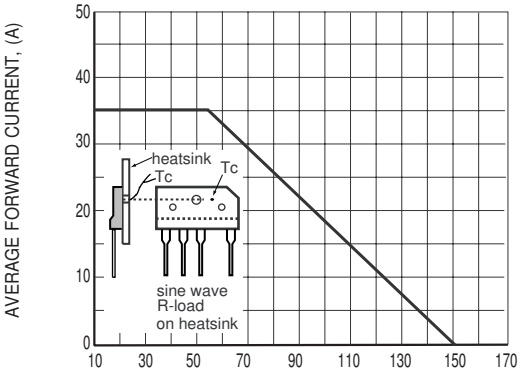


FIG.5 TYPICAL FORWARD CURRENT DERATING CURVE

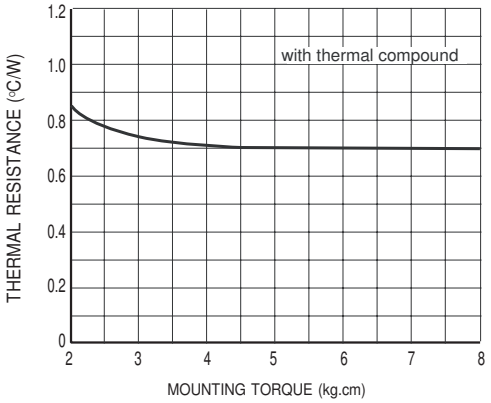


FIG.6 CONTACT THERMAL RESISTANCE fcf

RATING AND CHARACTERISTICS CURVES (T6ARS3505M THRU T6ARS3507M)

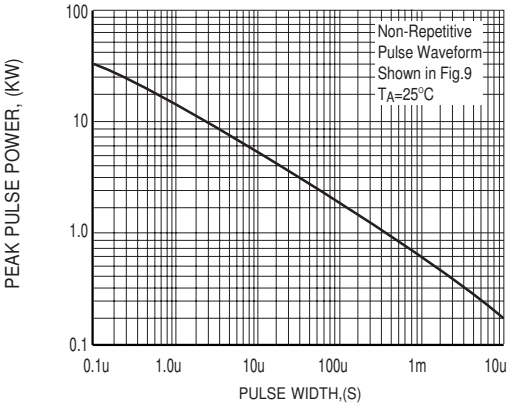


FIG.7 PEAK PULSE POWER RATING CURVE

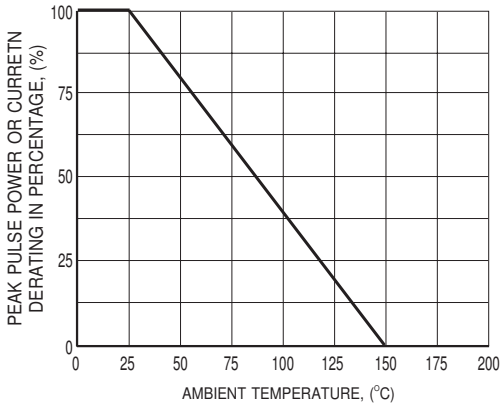


FIG.8 PULSE DERATING CURVE

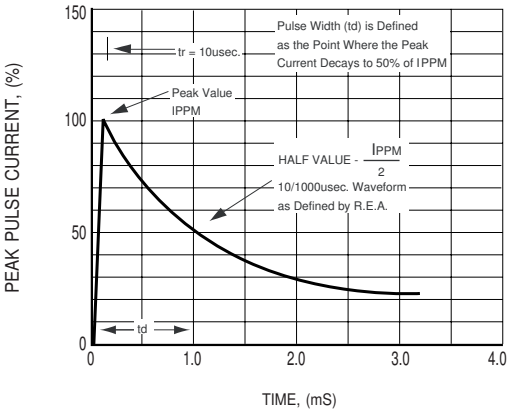


FIG.9 PULSE WAVEFORM

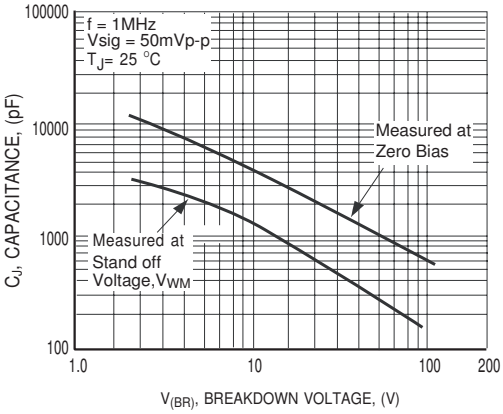
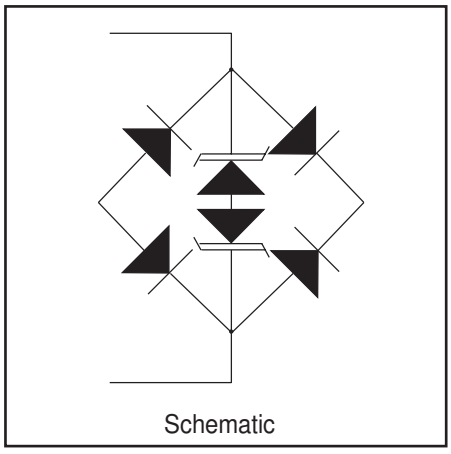


FIG.10 TYPICAL JUNCTION CAPACITANCE



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