

**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**

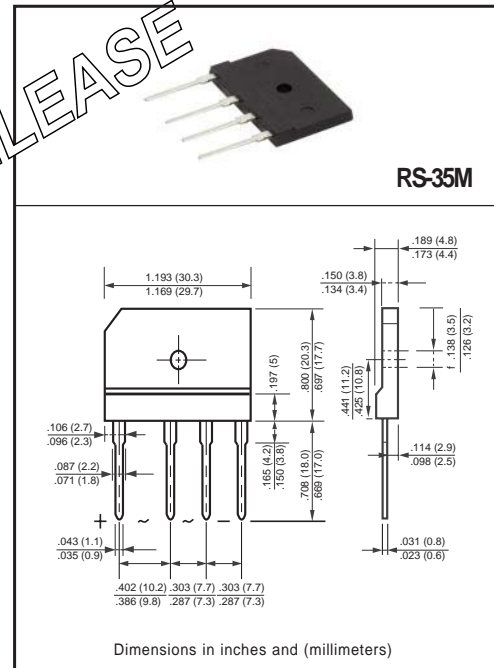
- \* Epoxy: Device has UL flammability classification 94V-0
- \* UL list the recognized component directory, file #E94233

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.



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

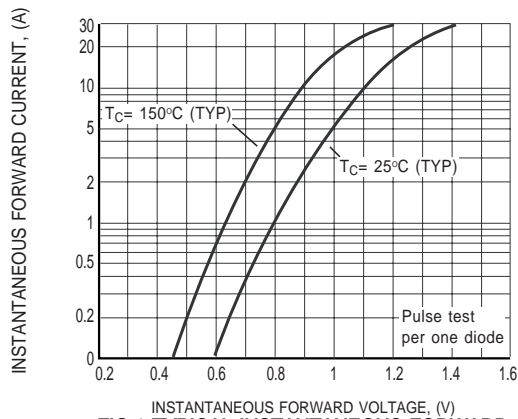
RATINGS	SYMBOL	T6ARS3505M	T6ARS3506M	T6ARS3507M	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	600	800	1000	Volts
Maximum Average Forward Rectified Current at $T_C = 55^\circ\text{C}$ (With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

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

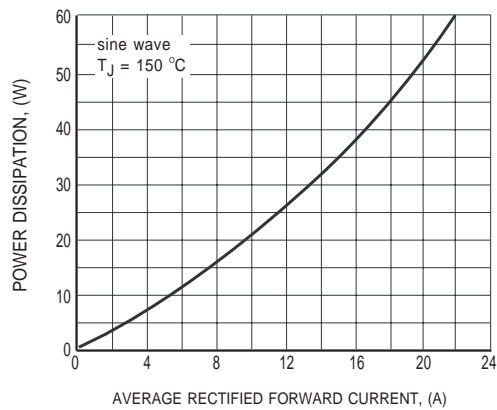
CHARACTERISTICS	SYMBOL	T6ARS3505M	T6ARS3506M	T6ARS3507M	UNITS
Maximum Instantaneous Forward Voltage at 17.5A DC	$V_F$	1.1			Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25^\circ\text{C}$	5.0			uAmps
	@ $T_A = 100^\circ\text{C}$	200			

NOTES : 1. Non-repetitive current pulse, per Fig.8 and derated above  $T_A=25^\circ\text{C}$  per Fig.7.  
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

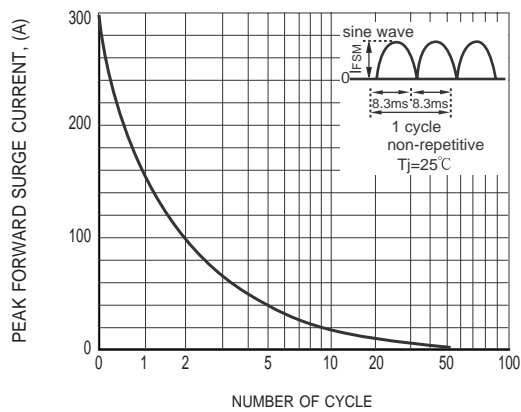
# RATING AND CHARACTERISTICS CURVES ( T6ARS3505M THRU T6ARS3507M )



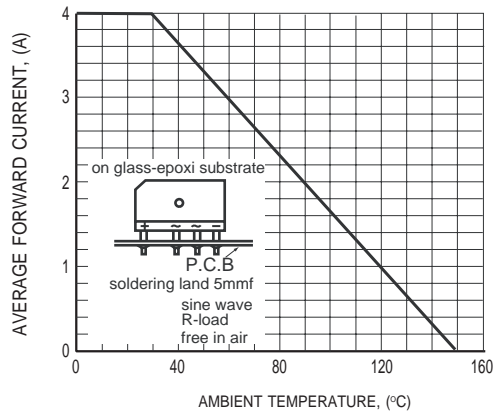
**FIG.1 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



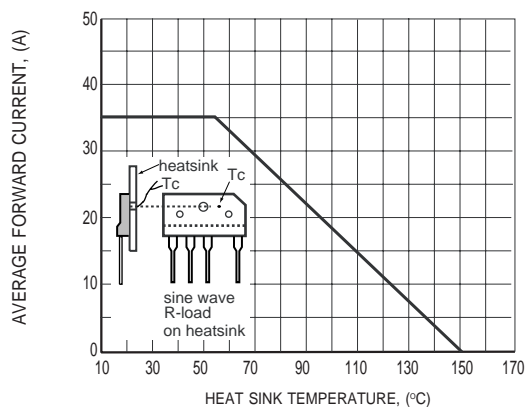
**FIG.2 POWER DISSIPATION**



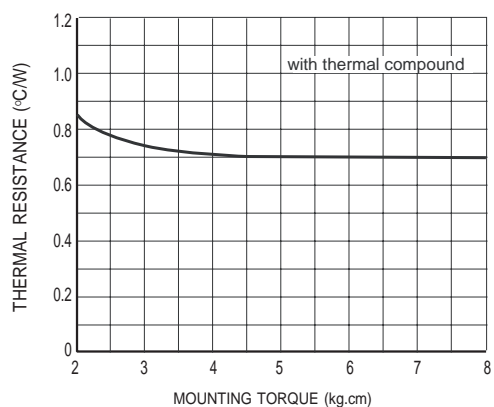
**FIG.3 SURGE FORWARD CURRENT CAPABILITY**



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



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



**FIG.6 CONTACT THERMAL RESISTANCE fct**

# RATING AND CHARACTERISTICS CURVES ( T6ARS3505M THRU T6ARS3507M )

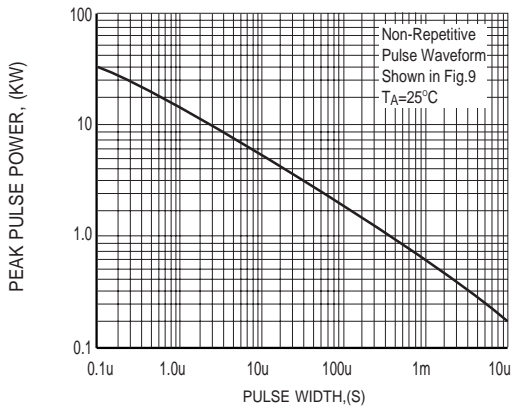


FIG.7 PEAK PULSE POWER RATING CURVE

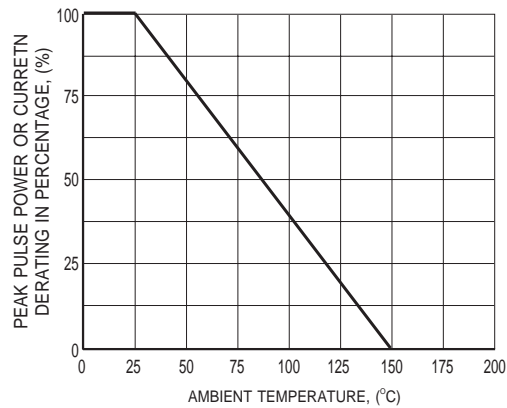


FIG.8 PULSE DERATING CURVE

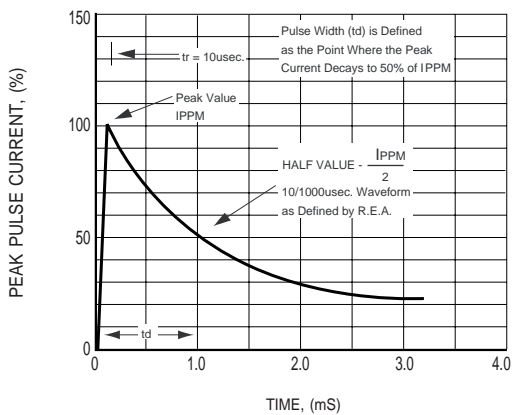


FIG.9 PULSE WAVEFORM

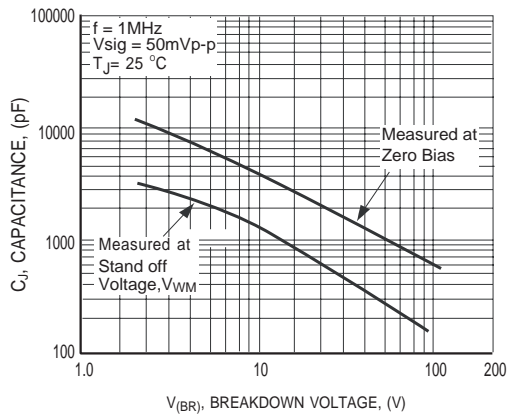
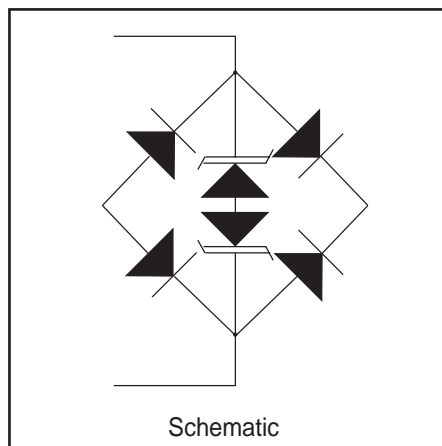


FIG.10 TYPICAL JUNCTION CAPACITANCE



## DISCLAIMER NOTICE

Rectron Inc reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. Rectron Inc or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on RECTRON data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. Rectron Inc does not assume any liability arising out of the application or use of any product or circuit.

Rectron products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of Rectron Inc. Customers using or selling Rectron components for use in such applications do so at their own risk and shall agree to fully indemnify Rectron Inc and its subsidiaries harmless against all claims, damages and expenditures.