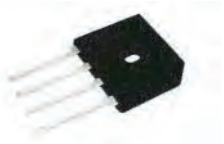
RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

T4ARBU405M THRU T4ARBU407M

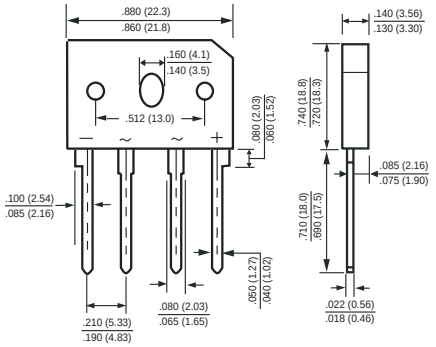
TRANSIENT VOLTAGE SUPPRESSORS
GPP BRIDGE RECTIFIER
VOLTAGE RANGE 600 to 1000 Volts CURRENT 4.0 Amperes

FEATURES
* Ideal for printed circuit board
* Surge overload rating: 130 amperes peak
* Mounting position: Any

MECHANICAL DATA
* Epoxy: Device has UL flammability classification 94V-O



RBU



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	T4ARBU405M	T4ARBU406M	T4ARBU407M	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_A = 50°C (With Heat-sink)	I_O	4.0			Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	130			Amps
Typical Current Squarad Time	I^2t	70			A^2/Sec
Peak Power Dissipation at T_A=25°C, T_P=1mS (Note 1)	P_{PPM}	Maximum 400			Watts
Breakdown Voltage Range at I_T=1mA	V_{BR}	380~ 420			Volts
Maximum Peak Pulse Current	I_{PPM}	0.73			Amps
Maximum Clamping Voltage at I_{PPM} =0.73A	V_C	548			Volts
Typical Junction Capacitance (Note 3)	C_J	40			pF
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150			°C

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

CHARACTERISTICS		SYMBOL	T4ARBU405M	T4ARBU406M	T4ARBU407M	UNITS
Maximum Instantaneous Forward Voltage at 4.0A 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 = 125°C		500			

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. Measured at 1MHz and applied reverse voltage of 4.0 voltage.
4. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

2010-05
REV:O

RATING AND CHARACTERISTICS CURVES (T4ARBU405M THRU T4ARBU407M)

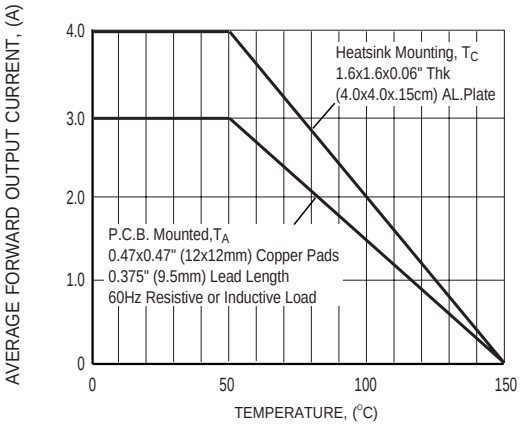


FIG.1 DERATING CURVE OUTPUT RECTIFIED CURRENT

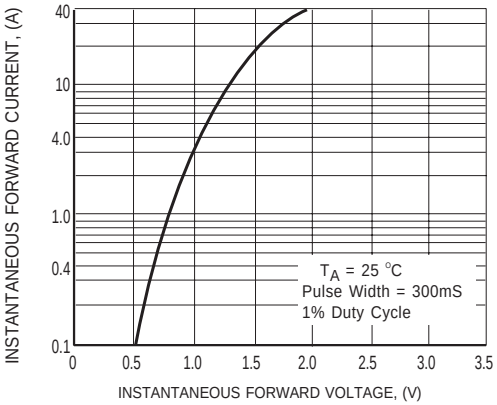


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

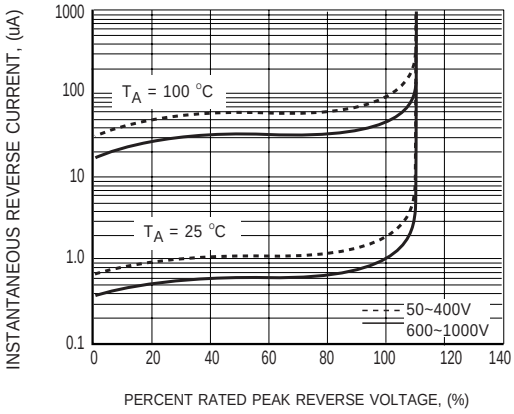


FIG.3 TYPICAL REVERSE CHARACTERISTICS

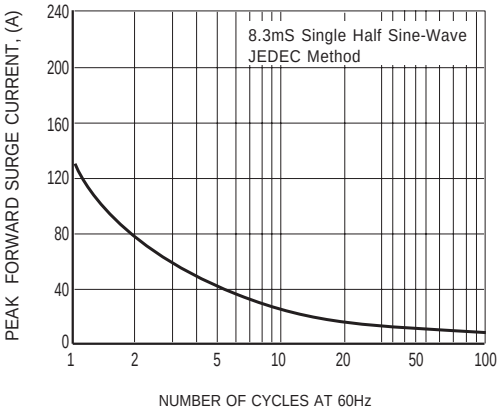


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

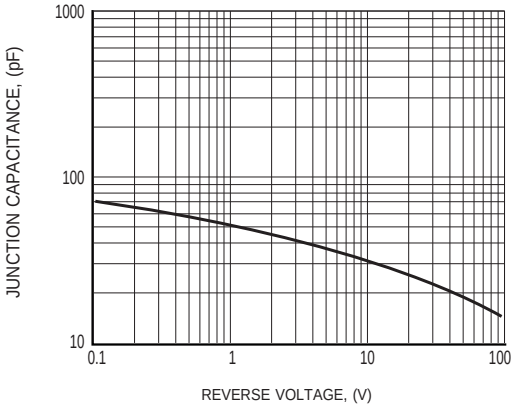


FIG.5 TYPICAL JUNCTION CAPACITANCE PER LEG

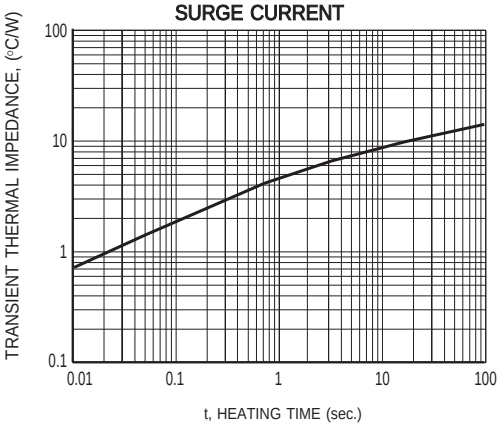


FIG.6 TYPICAL TRANSIENT THERMA IMPEDANCE

RATING AND CHARACTERISTICS CURVES (T4ARBU405M THRU T4ARBU407M)

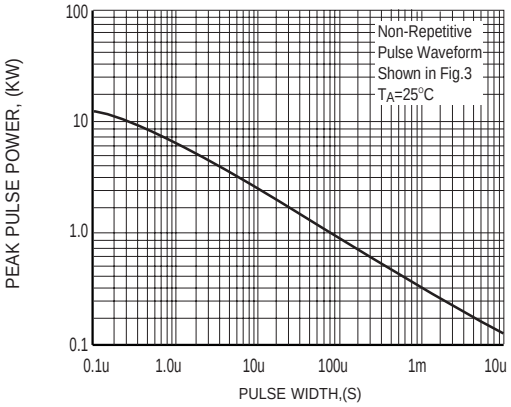


FIG.7 PEAK PULSE POWER RATING CURVE

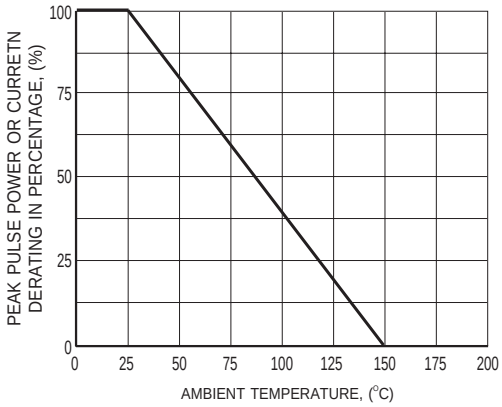


FIG.8 PULSE DERATING CURVE

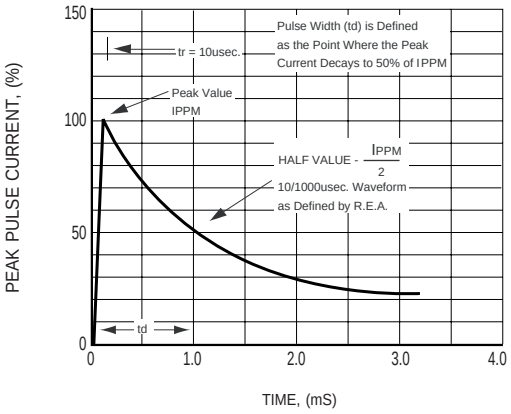


FIG.9 PULSE WAVEFORM

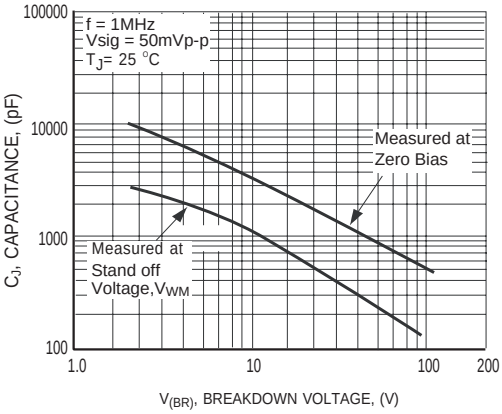
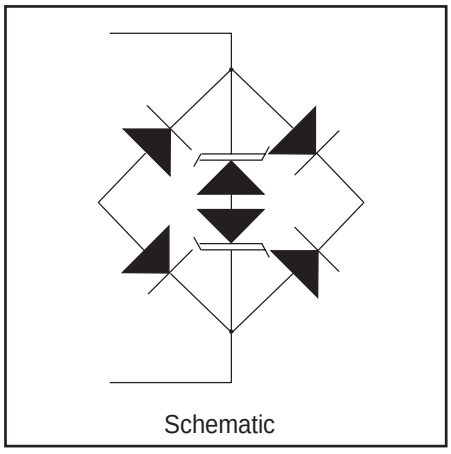


FIG.10 TYPICAL JUNCTION CAPACITANCE



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