



TIN CAN AUTOMOTIVE RECTIFIER

TR251 THRU TR254

VOLTAGE RANGE 100 to 400 Volts

CURRENT 25.0 Amperes

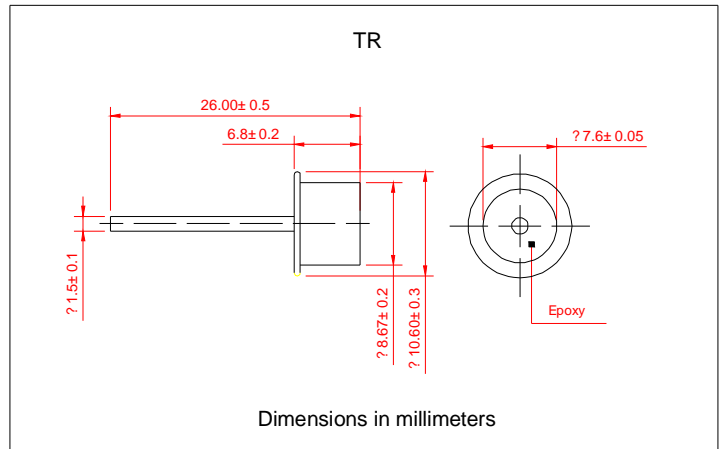
TECHNICAL SPECIFICATION:

FEATURES

- Low Leakage
- Low forward voltage drop
- High current capability
- High forward surge current capacity

MECHANICAL DATA

- Technology: vacuum soldered
- Case: Tin Can
- Polarity: the glass is blue (Positive)
the glass is white (Negative)
- Lead: Plated Ni lead, solderable per MIL-STD-202E method 208C
- Mounting: at will
- Weight: 0.09 ounces, 2.57 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60HZ, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	TR251	TR252	TR253	TR254	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	300	400	Volts
Maximum RMS Voltage	V_{RMS}	70	140	210	280	Volts
Maximum DC Blocking Voltage	V_{DC}	100	200	300	400	Volts
Maximum Average Forward Rectified Current, At $T_c=105^\circ\text{C}$	I_O	25				Amps
Peak Forward Surge Current 3.3ms single half sine wave superimposed on Rated load (JEDEC method)	I_{FSM}	400				Amps
Rating for fusing ($t < 8.3\text{ms}$)	I^2t	664				A^2S
Maximum instantaneous Forward Voltage at 100A	V_F	1.10				Volts
Maximum DC Reverse Current at Rated $T_A=25^\circ\text{C}$ DC Blocking Voltage $T_A=100^\circ\text{C}$	I_R	5.0				UA
		250				
Typical Thermal Resistance	$R_{\theta JC}$	1.0				$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	(-65 to +175)				$^\circ\text{C}$

Notes:

1. Enough heatsink must be considered in application.



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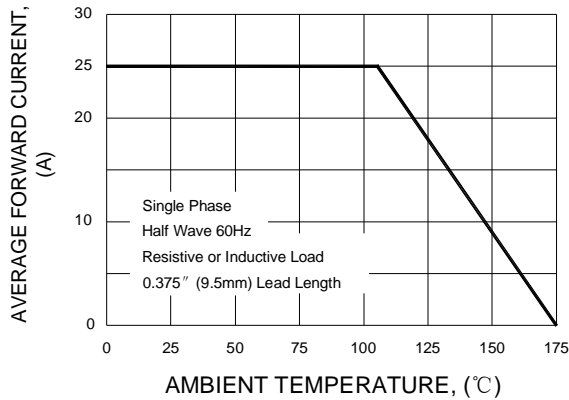
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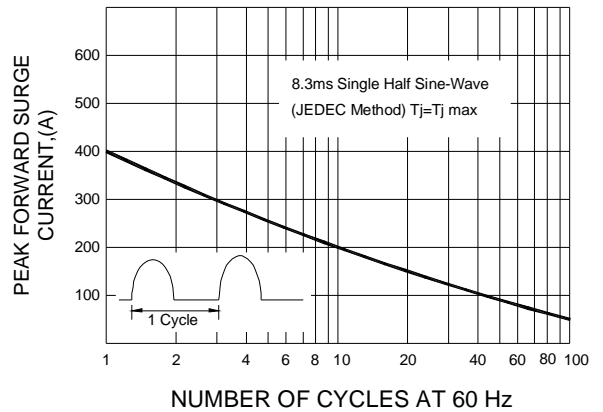
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RATINGS AND CHARACTERISTIC CURVES TR251 THRU TR254

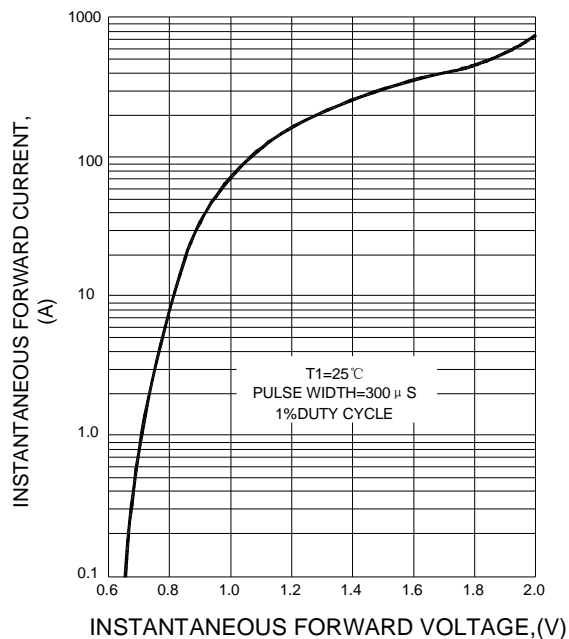
F1G.1 TYPICAL FORWARD CURRENT DERATING CURVE



F1G.2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



F1G.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F1G.4 FORWARD POWER DISSIPATION

