



## TIN CAN AVALANCHE AUTOMOTIVE RECTIFIER

TRA40M

AVALANCHE VOLTAGE 37 to 41 Volts

CURRENT 40 Amperes

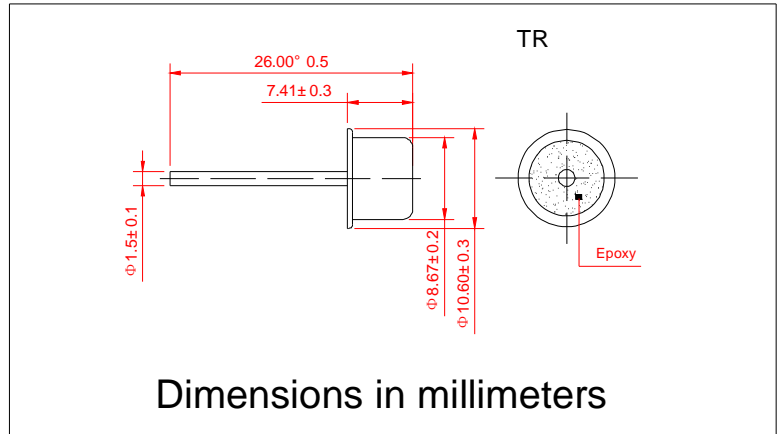
### Technical Specifecation:

#### Features:

- High power capability
- Economical
- Avalanche Voltage: 37V to 41V
- Glass passivated chip

#### MECHANICAL DATA

- Case: Tin Can
- Epoxy: UL94-0 rate flame ratardant
- Polarity: the glass is blue (Positive)  
the glass is white (Negative)
- Technology vacuum soldered
- Lead: Plated slug, solderable per MIL-STD-202E Method 208C
- Weight: 0.09 ounce, 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%

| Electrical Characteristics @ 25°C  | SYMBOLS        | MIN | NOMINAL     | MAX  | UNITS |
|--|----------------|-----|-------------|------|-------|
| Peak Repetitive Reverse Voltage  | $V_{RRM}$      |     | 28          |      | Volts |
| Working Peak Reverse Voltage   | $V_{RRM}$      |     | 28          |      |       |
| DC Blocking Voltage  | $V_{DC}$       |     | 28          |      |       |
| Average Rectified Forward Current ( $T_c=125^\circ\text{C}$ )  | $I_o$          |     | 40          |      | Amps  |
| Repetitive Peak Reverse Surge Current<br>$T_c=10\text{msec}$ Dury Cycle < 1%   | $I_{RSM}$      |     | 40          |      | Amps  |
| Breakdown Voltage ( $V_{br}$ @ $i_r=100\text{mA}$ , $T_c=25^\circ\text{C}$ )<br>$i_r=90\text{Amps}$ , $T_c=150^\circ\text{C}$ , $PW=80\text{usec}$ | $V_{br1}$      | 37  | 39          | 41   | Volts |
|  | $V_{br2}$      |     |             | 54   | Volts |
| Forward Voltage Drop @ $I_f=100\text{Amps}$ < 300usec  | $V_F$          |     | 1.02        | 1.05 | Volts |
| Peak Forward Surge Current   | $I_{FSM}$      |     | 500         |      | Amps  |
| Reverse Leakage ( $V_R=17\text{Vdc}$ ) $T_A=25^\circ\text{C}$  | $I_R$          |     | 1.0         | 2.0  | uAmps |
| Operating and Storage Junction Temperature Range   | $T_J, T_{STG}$ |     | -65 to +175 |      | °C    |

**Notes:** 1. Enough heatsink must be considered in application.

