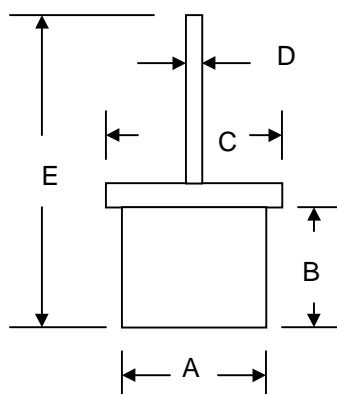


Features

- Glass Passivated Die Construction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Typical IR less than 10 μ A

Mechanical Data

- Case: All Copper Case and Components Hermetically Sealed
- Terminals: Contact Areas Readily Solderable
- Polarity: Cathode to Case (Reverse Units Are Available Upon Request and Are Designated By An "R" Suffix, i.e. TC2502R or TC2504R)
- Polarity: Red Color Equals Standard, Black Color Equals Reverse Polarity
- Mounting Position: Any



| Tin Can | | |
|----------------------|-------|-------|
| Dim | Min | Max |
| A | 8.70 | 8.75 |
| B | 6.35 | 6.40 |
| C | 10.45 | 10.50 |
| D | 1.45 | 1.49 |
| E | 27.60 | — |
| All Dimensions in mm | | |

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| Characteristic | Symbol | TC2500 | TC2501 | TC2502 | TC2503 | TC2504 | Unit |
|--|-----------------|-------------|--------|--------|--------|--------|------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 300 | 400 | V |
| Working Peak Reverse Voltage | V_{RWM} | | | | | | |
| DC Blocking Voltage | V_R | | | | | | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 35 | 70 | 140 | 210 | 280 | V |
| Average Rectified Output Current @ $T_A = 150^\circ\text{C}$ | I_O | 25 | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 400 | | | | | A |
| Forward Voltage @ $I_F = 50\text{A}$ | V_{FM} | 1.0 | | | | | V |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$ | I_{RM} | 10 500 | | | | | μA |
| Typical Junction Capacitance (Note 1) | C_j | 300 | | | | | pF |
| Typical Thermal Resistance Junction to Case (Note 2) | $R_{\theta JC}$ | 1.0 | | | | | K/W |
| Operating and Storage Temperature Range | T_J, T_{STG} | -65 to +175 | | | | | $^\circ\text{C}$ |

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance: Junction to case, single side cooled.

ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity |
|--------------------|---------------------|--------------------------|
| TC2500 | Press Fit | 100 Units/Tray |
| TC2501 | Press Fit | 100 Units/Tray |
| TC2502 | Press Fit | 100 Units/Tray |
| TC2503 | Press Fit | 100 Units/Tray |
| TC2504 | Press Fit | 100 Units/Tray |

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.