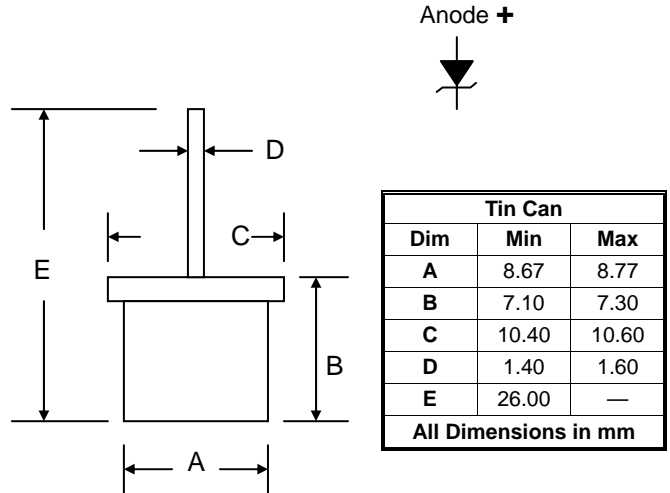


Features

- Glass Passivated Die Construction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Typical IR less than 200nA

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 A "R" Suffix, i.e. TC2520R or TC2524R)
- Polarity: Red Color Equals Standard, Black Color Equals Reverse Polarity
- Mounting Position: Any
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 2**



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 | TC2520 | TC2524 | Unit |
|---|----------------|-------------|--------|--------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 16 | 20 | V |
| Working Peak Reverse Voltage | V_{RWM} | | | |
| DC Blocking Voltage | V_R | | | |
| Average Rectified Output Current @ $T_C = 150^\circ\text{C}$ | I_O | 25 | | A |
| Breakdown Voltage Min. @ $I_R = 100\text{mA}$ | V_{BR} | 20 | 24 | V |
| Breakdown Voltage Max. @ $I_R = 100\text{mA}$ | | 26 | 32 | |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method) | I_{FSM} | 300 | | A |
| Forward Voltage @ $I_F = 25\text{A}$ | V_{FM} | 1.0 | | V |
| Peak Reverse Current At Rated DC Blocking Voltage @ $T_A = 25^\circ\text{C}$ | I_{RM} | 200 | | nA |
| Typical Junction Capacitance (Note 1) | C_J | 300 | | pF |
| Typical Thermal Resistance (Note 2) | R_{JC} | 1.2 | | $^\circ\text{C/W}$ |
| 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 |
|-------------|-------------------------|-------------------|
| TC2520 | 5/16" Tin Can Press-Fit | 500 Units/Box |
| TC2524 | 5/16" Tin Can Press-Fit | 500 Units/Box |

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, TC2520-LF.**

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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