

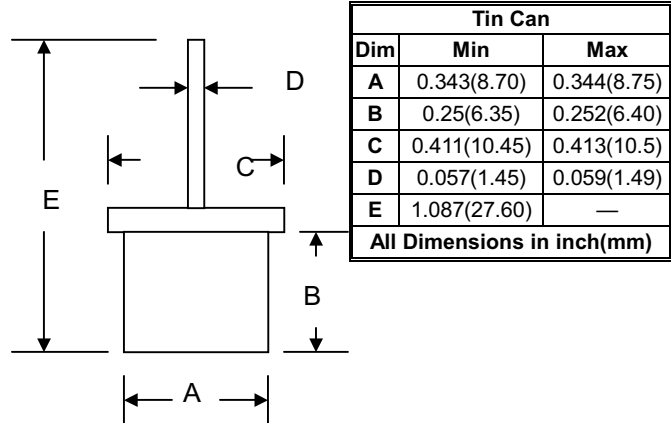
Data Sheet 2524 Rev.—

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. TC3502R or TC3504R)
- Polarity: Red Color Equals Standard, Black Color Equals Reverse Polarity
- Mounting Position: Any



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	TC3500	TC3501	TC3502	TC3503	TC3504	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	300	400	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	210	280	V
Average Rectified Output Current @ $T_A = 150^{\circ}\text{C}$	I_o	35					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 @ $I_F = 80\text{A}$	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.