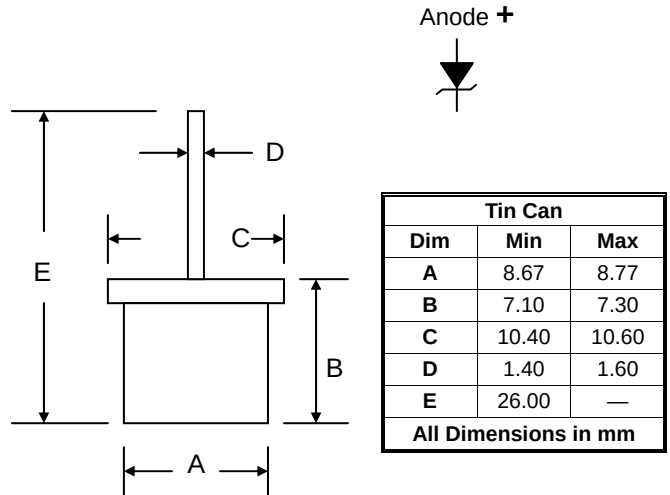


Features

- Glass Passivated Die Construction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Typical I_R 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. TC3520R or TC3524R)
- 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	TC3520	TC3524	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	16	20	V
Average Rectified Output Current @ $T_C = 150^\circ\text{C}$	I_O	35		A
Breakdown Voltage Min. @ $I_R = 100\text{mA}$ Breakdown Voltage Max. @ $I_R = 100\text{mA}$	V_{BR}	20 26	24 32	V
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	400		A
Forward Voltage @ $I_F = 35\text{A}$	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)	$R_{\theta JC}$	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
TC3520	5/16" Tin Can Press-Fit	500 Units/Box
TC3524	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, TC3520-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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