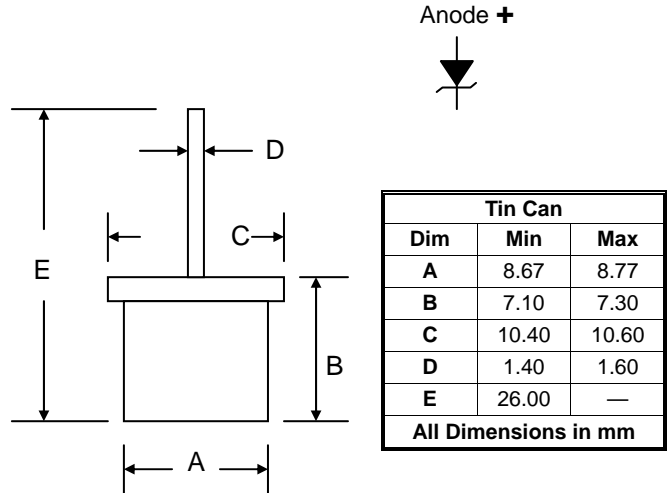


## Features

- 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. 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<sub>A</sub>=25°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	V <sub>RRM</sub>	16	20	V
Working Peak Reverse Voltage	V <sub>RFM</sub>			
DC Blocking Voltage	V <sub>R</sub>			
Average Rectified Output Current @T <sub>C</sub> = 150°C	I <sub>O</sub>	35		A
Breakdown Voltage Min. @I <sub>R</sub> = 100mA	V <sub>BR</sub>	20	24	V
Breakdown Voltage Max. @I <sub>R</sub> = 100mA		26	32	
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	400		A
Forward Voltage @I <sub>F</sub> = 35A	V <sub>FM</sub>	1.0		V
Peak Reverse Current At Rated DC Blocking Voltage @T <sub>A</sub> = 25°C	I <sub>RM</sub>	200		nA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	300		pF
Typical Thermal Resistance (Note 2)	R <sub>JC</sub>	1.2		°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +175		°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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*We power your everyday.*