

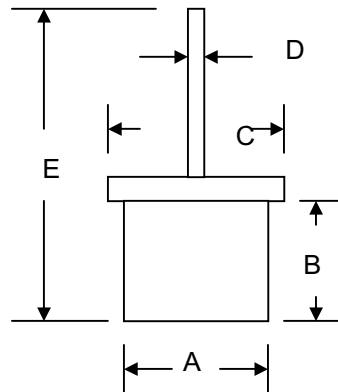
Data Sheet 2523 Rev.—

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. TC2502R or TC2504R)
- Polarity: Red Color Equals Standard, Black Color Equals Reverse Polarity
- Mounting Position: Any



Tin Can		
Dim	Min	Max
A	0.343(8.70)	0.344(8.75)
B	0.25(6.35)	0.252(6.40)
C	0.411(10.45)	0.413(10.5)
D	0.057(1.45)	0.059(1.49)
E	1.087(27.60)	—
All Dimensions in inch(mm)		

Maximum Ratings and Electrical Characteristics @T_A=25°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	TC2504	TC2506	TC2508	TC2510	Unit
Peak Repetitive Reverse Voltage	V _{RRM}								
Working Peak Reverse Voltage	V _{RWM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _A = 150°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 = 50A	V _{FM}	1.0							V
Peak Reverse Current @T _A = 25°C	I _{RM}	10							μ A
At Rated DC Blocking Voltage @T _A = 100°C		500							
Typical Junction Capacitance (Note 1)	C _j	300							pF
Typical Thermal Resistance Junction to Case (Note 2)	R _{θJC}	1.0							K/W
Operating and Storage Temperature Range	T _J , T _{STG}	-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.