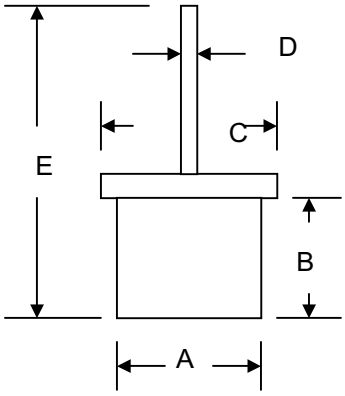
Data Sheet 2523 Rev.—

Features

- Glass Passivated Die Construction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Typical I_R less than 10μA

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 Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
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 At Rated DC Blocking Voltage @T_A = 100°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							°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.