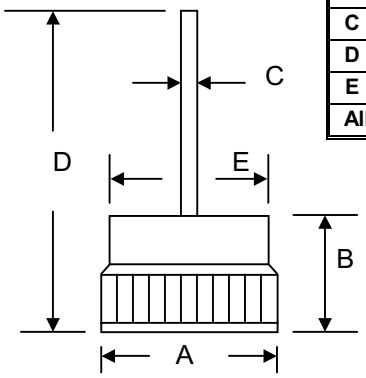
Data Sheet 2505 Rev.—

Features

- Diffused Junction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Typical I_R less than 10μA

13mm Bosch		
Dim	**Min**	**Max**
A	0.508(12.9)	0.516(13.1)
B	0.303(7.70)	0.319(8.10)
C	0.049(1.25)	0.052(1.31)
D	1.145(29.1)	1.224(31.1)
E	0.437(11.1)	0.453(11.5)
All Dimensions in inch(mm)		



Mechanical Data

- Case: Copper Case
- Terminals: Contact Areas Readily Solderable
- Polarity: Cathode to Case(Reverse Units Are Available Upon Request and Are Designated By An “R” Suffix, i.e. BD3502R or BD3504R)
- Polarity: Red Color Equals Standard, Black Color Equals Reverse Polarity
- Mounting Position: Any

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	BD3500	BD3501	BD3502	BD3503	BD3504	BD3505	BD3506	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	300	400	500	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	210	280	350	420	V
Average Rectified Output Current @T_A = 150°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 = 80A	V_{FM}	1.18							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)	$R_{\theta JC}$	1.2							K/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175							°C

***Glass passivated forms are available upon request**

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.