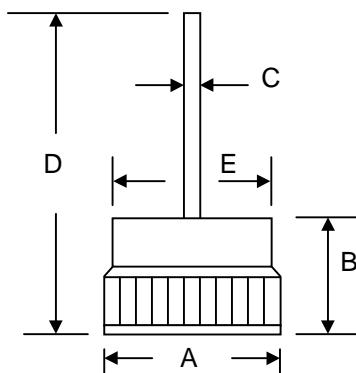


Features

- Diffused Junction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Typical IR less than 10 μ A

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. BD5002R or BD5004R)
- Polarity: Red Color Equals Standard, Black Color Equals Reverse Polarity
- Mounting Position: Any



13mm Bosch		
Dim	Min	Max
A	12.90	13.06
B	7.70	8.10
C	1.25	1.31
D	29.10	31.10
E	11.10	11.50
All Dimensions in mm		

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	BD5000	BD5001	BD5002	BD5003	BD5004	BD5005	BD5006	Unit
Peak Repetitive Reverse Voltage	V _{RRM}								
Working Peak Reverse Voltage	V _{RWM}								
DC Blocking Voltage	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 @ $T_A = 150^\circ\text{C}$	I _O				50				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}				500				A
Forward Voltage @ $I_F = 100\text{A}$	V _{FM}				1.18				V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I _{RM}				10	500			μA
Typical Junction Capacitance (Note 1)	C _j				300				pF
Typical Thermal Resistance Junction to Case (Note 2)	R _{θJC}				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.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
BD5000	Press Fit	100 Units/Tray
BD5001	Press Fit	100 Units/Tray
BD5002	Press Fit	100 Units/Tray
BD5003	Press Fit	100 Units/Tray
BD5004	Press Fit	100 Units/Tray
BD5005	Press Fit	100 Units/Tray
BD5006	Press Fit	100 Units/Tray

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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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.