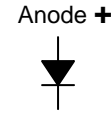
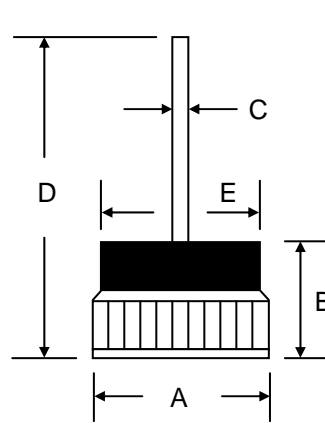


Features

- Diffused Junction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Typical IR less than 5.0μA

Mechanical Data

- Case: 13mm Bosch Type Press-Fit
- Terminals: Contact Areas Readily Solderable
- Polarity: Cathode to Case (Reverse Units Are Available Upon Request and Are Designated By A "R" Suffix, i.e. BD2502R or BD2504R)
- 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**



| 13mm Bosch | | |
|----------------------|-------|-------|
| Dim | Min | Max |
| A | 12.80 | 13.20 |
| B | 9.40 | — |
| C | 1.25 | 1.31 |
| D | 28.00 | — |
| E | 9.90 | 11.10 |
| All Dimensions in 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 | BD2500 | BD2501 | BD2502 | BD2503 | BD2504 | BD2505 | BD2506 | Unit |
|---|-----------------------------------|-------------|--------|--------|--------|--------|--------|--------|------|
| Peak Repetitive Reverse Voltage | V _{RRM} | | | | | | | | V |
| Working Peak Reverse Voltage | V _{RWM} | 50 | 100 | 200 | 300 | 400 | 500 | 600 | |
| DC Blocking Voltage | V _R | | | | | | | | |
| RMS Reverse Voltage | V _{R(RMS)} | 35 | 70 | 140 | 210 | 280 | 350 | 420 | V |
| Average Rectified Output Current @T _C = 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} | 300 | | | | | | | A |
| Forward Voltage @I _F = 25A | V _{FM} | 1.0 | | | | | | | V |
| Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C | I _{RM} | 5.0 500 | | | | | | | μA |
| Typical Junction Capacitance (Note 1) | C _J | 300 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | R _{JC} | 1.2 | | | | | | | °C/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.

ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity |
|-------------|----------------------|-------------------|
| BD2500 | 13mm Bosch Press-Fit | 180 Units/Box |
| BD2501 | 13mm Bosch Press-Fit | 180 Units/Box |
| BD2502 | 13mm Bosch Press-Fit | 180 Units/Box |
| BD2503 | 13mm Bosch Press-Fit | 180 Units/Box |
| BD2504 | 13mm Bosch Press-Fit | 180 Units/Box |
| BD2505 | 13mm Bosch Press-Fit | 180 Units/Box |
| BD2506 | 13mm Bosch Press-Fit | 180 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, BD2500-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.

Won-Top Electronics Co., Ltd.
No. 44 Yu Kang North 3rd Road,
Chine Chen Dist., Kaohsiung 806, Taiwan
Phone: 886-7-822-5408 or 886-7-822-5410
Fax: 886-7-822-5417
Email: sales@wontop.com
Internet: <http://www.wontop.com>

We power your everyday.