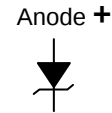
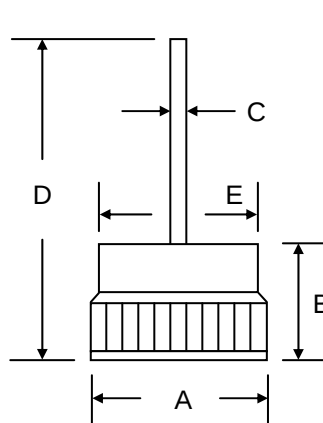


## Features

- Diffused Junction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Typical  $I_R$  less than 200nA

## Mechanical Data

- Case: 13mm Motorola 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. MD3520R or MD3524R)
- 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 Motorola        |       |       |
|----------------------|-------|-------|
| Dim                  | Min   | Max   |
| A                    | 12.80 | 13.20 |
| B                    | 7.70  | 8.10  |
| C                    | 1.25  | 1.31  |
| D                    | 25.00 | —     |
| 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          | MD3520      | MD3524 | MD3536 | Unit               |
|-----------------------------------------------------------------------------------------------------------------------|-----------------|-------------|--------|--------|--------------------|
| Peak Repetitive Reverse Voltage                                                                                       | $V_{RRM}$       | 16          | 20     | 32     | V                  |
| Working Peak Reverse Voltage                                                                                          | $V_{RWM}$       |             |        |        |                    |
| DC Blocking Voltage                                                                                                   | $V_R$           |             |        |        |                    |
| Average Rectified Output Current @ $T_C = 150^\circ\text{C}$                                                          | $I_O$           | 35          |        |        | A                  |
| Breakdown Voltage Min. @ $I_R = 100\text{mA}$                                                                         | $V_{BR}$        | 20          | 24     | 36     | V                  |
| Breakdown Voltage Max. @ $I_R = 100\text{mA}$                                                                         |                 | 26          | 32     | 42     |                    |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single Half Sine-Wave Superimposed on<br>Rated Load (JEDEC Method) | $I_{FSM}$       | 400         |        |        | A                  |
| Forward Voltage @ $I_F = 35\text{A}$                                                                                  | $V_{FM}$        | 1.0         |        |        | V                  |
| Peak Reverse Current<br>At Rated DC Blocking Voltage @ $T_A = 25^\circ\text{C}$                                       | $I_{RM}$        | 200         |        |        | nA                 |
| Typical Junction Capacitance (Note 1)                                                                                 | $C_J$           | 300         |        |        | pF                 |
| Typical Thermal Resistance (Note 2)                                                                                   | $R_{\theta JC}$ | 1.2         |        |        | $^\circ\text{C/W}$ |
| Operating and Storage Temperature Range                                                                               | $T_J, T_{STG}$  | -65 to +175 |        |        | $^\circ\text{C}$   |

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 |
|-------------|-------------------------|-------------------|
| MD3520      | 13mm Motorola Press-Fit | 180 Units/Box     |
| MD3524      | 13mm Motorola Press-Fit | 180 Units/Box     |
| MD3536      | 13mm Motorola 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, MD3520-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.

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*We power your everyday.*