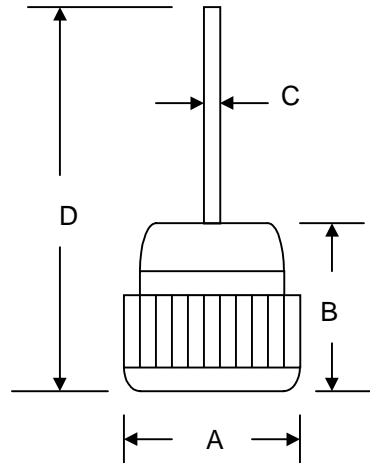


Features

- Diffused Junction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Typical IR less than 20 μ A

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. LD5002R or LD5004R)
- Polarity: Red Color Equals Standard, Black Color Equals Reverse Polarity
- Mounting Position: Any



| 10mm Lucas | | |
|----------------------|-------|-------|
| Dim | Min | Max |
| A | 10.13 | 10.18 |
| B | 8.89 | 9.4 |
| C | 1.27 | 1.35 |
| D | 29.84 | — |
| 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 | LD5000 | LD5001 | LD5002 | LD5003 | LD5004 | LD5005 | LD5006 | Unit |
|---|-----------------|-------------|--------|--------|--------|--------|--------|--------|------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 300 | 400 | 500 | 600 | V |
| Working Peak Reverse Voltage | V_{RWM} | | | | | | | | |
| DC Blocking Voltage | V_R | | | | | | | | |
| 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} | 1.10 | | | | | | | V |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$ | I_{RM} | 20 500 | | | | | | | 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 | | | | | | | $^\circ\text{C}$ |

***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 |
|-------------|--------------|-------------------|
| LD5000 | Press Fit | 100 Units/Tray |
| LD5001 | Press Fit | 100 Units/Tray |
| LD5002 | Press Fit | 100 Units/Tray |
| LD5003 | Press Fit | 100 Units/Tray |
| LD5004 | Press Fit | 100 Units/Tray |
| LD5005 | Press Fit | 100 Units/Tray |
| LD5006 | 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.