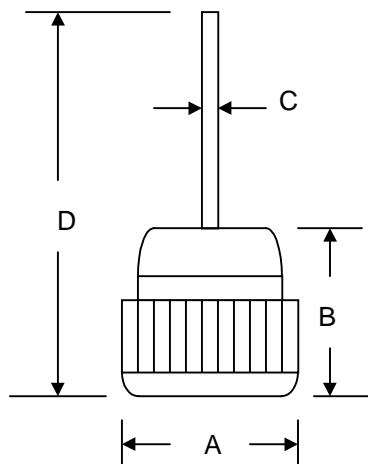


### Features

- Diffused Junction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Typical IR less than 20 $\mu$ 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							$\mu\text{A}$
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**

<b>Product No.</b>	<b>Package Type</b>	<b>Shipping Quantity</b>
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.