

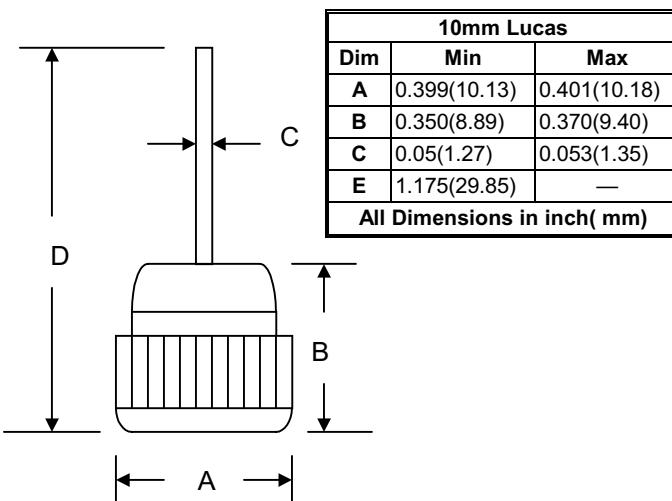
## Data Sheet 2514 Rev.—

## 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. LD2502R or LD2504R)
- Polarity: Red Color Equals Standard, Black Color Equals Reverse Polarity
- Mounting Position: Any

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	LD2500	LD2501	LD2502	LD2503	LD2504	LD2505	LD2506	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$								
Working Peak Reverse Voltage	$VR_{WM}$	50	100	200	300	400	500	600	V
DC Blocking Voltage	$VR$								
RMS Reverse Voltage	$VR(\text{RMS})$	35	70	140	210	280	350	420	V
Average Rectified Output Current @ $T_A = 150^\circ\text{C}$	$I_o$				25				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$				400				A
Forward Voltage @ $I_F = 50\text{A}$	$V_{FM}$				1.05				V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_{RM}$				20				$\mu\text{A}$
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.