



Micro Commercial Components

Micro Commercial Components  
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# LLSD101A THRU LLSD101C

## Features

- Guard Ring Construction for Transient Protection
- Low Reverse Capacitance
- Low Forward Voltage Drop and Low Reverse Recovery Time
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates Compliant. See ordering information)

## Mechanical Data

- Case: MiniMELF, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Indicated by Cathode Band
- Weight: 0.05 grams ( approx. )

## Maximum Ratings @25°C Unless Otherwise Specified

Characteristic	Symbol	LLSD101A	LLSD101B	LLSD101C
Peak Repetitive Reverse Voltage	$V_{RRM}$			
Working Peak Reverse Voltage	$V_{RWM}$	60V	50V	40V
DC Blocking Voltage	$V_R$			
RMS Reverse Voltage	$V_{R(RMS)}$	42V	35V	28V
Forward Continuous Current(Note 2)	$I_{FM}$	15mA		
Non-Repetitive Peak @ $t \leq 1.0s$ Forward Surge Current @ $t = 10\mu s$	$I_{FSM}$	50mA 2.0A		
Power Dissipation(Note 2)	$P_d$	400mW		
Thermal Resistance(Note 2)	$R$	375K/W		
Operation & Storage Temp. Range	$T_j, T_{STG}$	-55 to 150°C		

## Electrical Characteristics @25°C Unless Otherwise Specified

Characteristic	Symbol	Min	Max	Unit	Test Cond.
Peak Reverse Current	$I_{RM}$	-----	200	nA	$V_R = 50V$ $V_R = 40V$ $V_R = 30V$
Forward Volt. Drop	$V_{FM}$	-----	0.41 0.40 0.39 1.00 0.95 0.90	V	$I_F = 1.0mA$ $I_F = 1.0mA$ $I_F = 1.0mA$ $I_F = 15mA$ $I_F = 15mA$ $I_F = 15mA$
Junction Capacitance	$C_j$	-----	2.0 2.1 2.2	pF	$V_R = 0V, f = 1.0MHz$
Reverse Recovery Time	$t_{rr}$	-----	1.0	ns	$I_F = I_R = 5mA,$ recover to 0.1 $I_R$

Note:1.Lead in Glass Exemption Applied, see EU Directive Annex 5.  
2.Valid provided that electrodes are kept at ambient temperature

## Schottky Barrier Switching Diode

### MINIMELF

The diagram shows a side view of a MiniMELF diode. Dimension A is the total length, B is the length of the cathode band, and C is the height of the diode body. A shaded vertical band on the diode is labeled 'Cathode Mark'.

DIM	DIMENSION				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.134	.142	3.40	3.60	
B	.008	.016	.20	.40	
C	.055	.059	1.40	1.50	

### SUGGESTED SOLDER PAD LAYOUT

The diagram shows the suggested solder pad layout for the diode. It consists of two rectangular pads. The distance between the inner edges of the pads is 0.105 inches. The height of each pad is 0.075 inches. The distance between the outer edges of the pads is 0.030 inches.

# LLSD101A thru LLSD101C

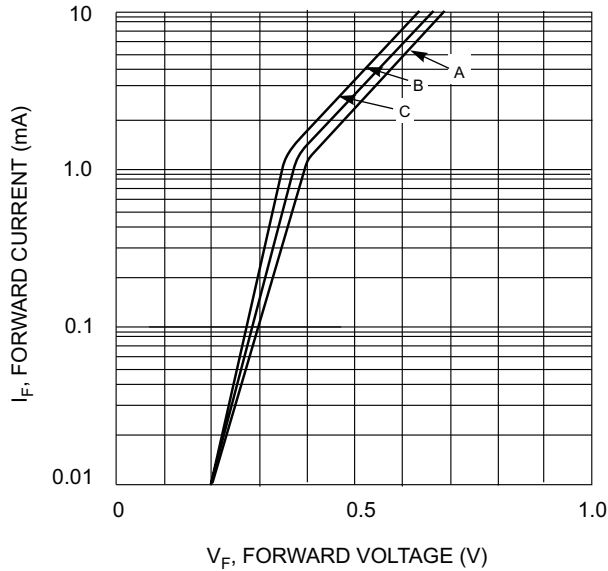


Fig. 1 Typical Forward Characteristic Variations for Primary Conduction

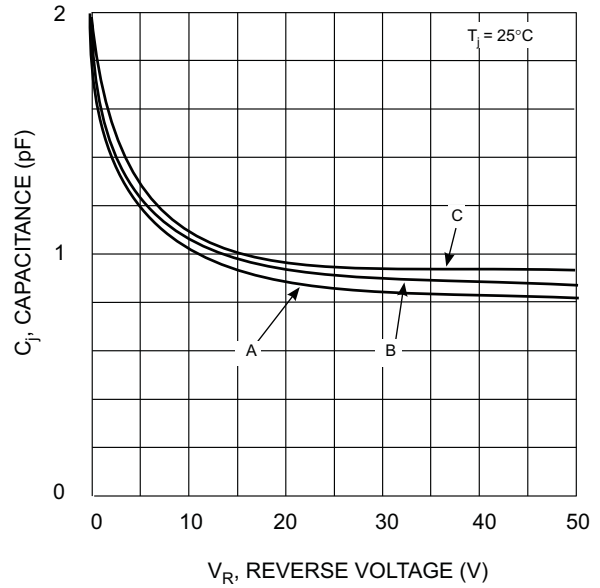


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage



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## Ordering Information

Device (Part Number)-TP	Packing Tape&Reel;2.5Kpcs/Reel
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