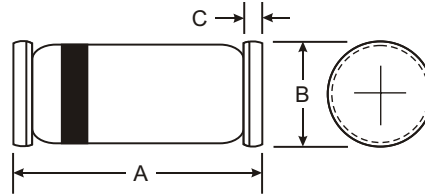


### Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Fast Reverse Recovery Time
- Low Reverse Capacitance



### Mechanical Data

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

MiniMELF		
Dim	Min	Max
A	3.30	3.70
B	1.30	1.60
C	0.28	0.50
All Dimensions in mm		

### Maximum Ratings @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	LLSD101A	LLSD101B	LLSD101C	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	60	50	40	V
Working Peak Reverse Voltage	V <sub>RWM</sub>				
DC Blocking Voltage	V <sub>R</sub>				
RMS Reverse Voltage	V <sub>R(RMS)</sub>	42	35	28	V
Forward Continuous Current (Note 1)	I <sub>FM</sub>	15			mA
Non-Repetitive Peak Forward Surge Current @ t ≤ 1.0s @ t = 10μs	I <sub>FSM</sub>	50 2.0			mA A
Power Dissipation (Note 1)	P <sub>d</sub>	400			mW
Thermal Resistance, Junction to Ambient Air (Note 1)	R <sub>θJA</sub>	375			°C/W
Operating Temperature Range	T <sub>j</sub>	-55 to +125			°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150			°C

### Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Forward Voltage Drop (Note 2)	V <sub>F</sub>	—	0.41 0.40 0.39 1.00 0.95 0.90	V	I <sub>F</sub> = 1.0mA I <sub>F</sub> = 1.0mA I <sub>F</sub> = 1.0mA I <sub>F</sub> = 15mA I <sub>F</sub> = 15mA I <sub>F</sub> = 15mA
Reverse Current (Note 2)	I <sub>R</sub>	—	200	nA	V <sub>R</sub> = 50V V <sub>R</sub> = 40V V <sub>R</sub> = 30V
Total Capacitance	C <sub>T</sub>	—	2.0 2.1 2.2	pF	V <sub>R</sub> = 0V, f = 1.0MHz
Reverse Recovery Time	t <sub>rr</sub>	—	1.0	ns	I <sub>F</sub> = I <sub>R</sub> = 5.0mA, I <sub>rr</sub> = 0.1 x I <sub>R</sub> , R <sub>L</sub> = 100Ω

- Note:
1. Part mounted on FR-4 board with recommended pad layout, which can be found on our website at <http://www.diodes.com/datasheets/ap02001.pdf>.
  2. Short duration test pulse used to minimize self-heating effect.

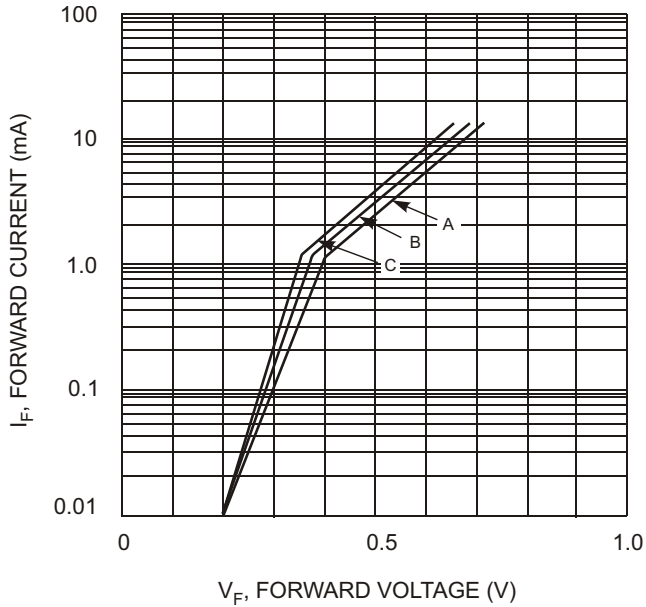


Fig. 1 Typical Forward Characteristic Variations for Primary Conduction

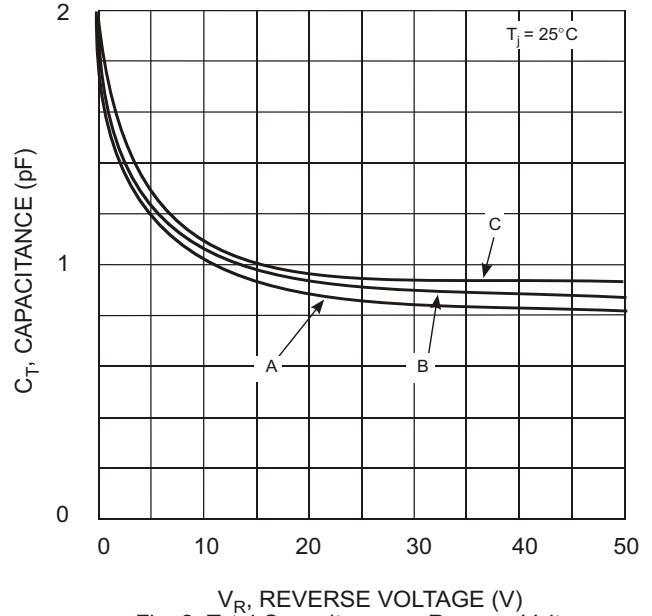


Fig. 2 Total Capacitance vs Reverse Voltage

**Ordering Information** (Note 3)

Device	Packaging	Shipping
LLSD101A-7 LLSD101A-13 LLSD101B-7 LLSD101B-13 LLSD101C-7 LLSD101C-13	MiniMELF	3000/Tape & Reel 10000/Tape & Reel 3000/Tape & Reel 10000/Tape & Reel 3000/Tape & Reel 10000/Tape & Reel

Notes: 3. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.