



LL / LLSD / SD101A - 101C

SCHOTTKY BARRIER SWITCHING DIODE

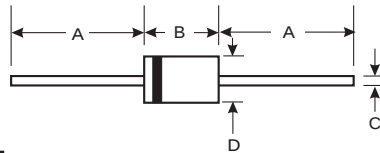
Features

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

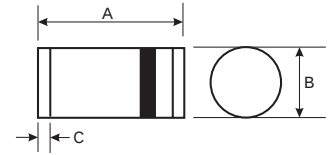
Mechanical Data

- Case: Glass, DO-35, MiniMELF
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Marking: DO-35 Type Number
MiniMELF Cathode Band Only
- Approx. Weight: DO-35 0.13 grams
MiniMELF 0.05 grams

SD Devices



LL/LLSD Devices



DO-35		
Dim	Min	Max
A	25.40	—
B	—	4.00
C	—	0.60
D	—	2.00
All Dimensions in mm		

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_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage (V _{RRM}) Working Peak Reverse Voltage (V _{RWM}) DC Blocking Voltage (V _R)	LL/LLSD/SD101A LL/LLSD/SD101B LL/LLSD/SD101C	60 50 40	V
Forward Continuous Current (Note 1)	I _{FM}	15	mA
RMS Reverse Voltage	LL/LLSD/SD101A LL/LLSD/SD101B LL/LLSD/SD101C	42 35 28	V
Non-Repetitive Peak Forward Surge Current @ t ≤ 1.0s @ t = 10 ms	I _{FSM}	50 2.0	mA A
Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	375	K/W
Power Dissipation (Note 1)	P _d	400	mW
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +175	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Maximum Peak Reverse Current	LL/LLSD/SD101A LL/LLSD/SD101B LL/LLSD/SD101C	I _{RM}	— 200	nA	V _R = 50V V _R = 40V V _R = 30V
Maximum Forward Voltage Drop	LL/LLSD/SD101A LL/LLSD/SD101B LL/LLSD/SD101C	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	LL/LLSD/SD101A LL/LLSD/SD101B LL/LLSD/SD101C	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

Notes: 1. Valid provided that leads are at a distance of 10mm from the case or electrodes of the MiniMELF case are kept at ambient.

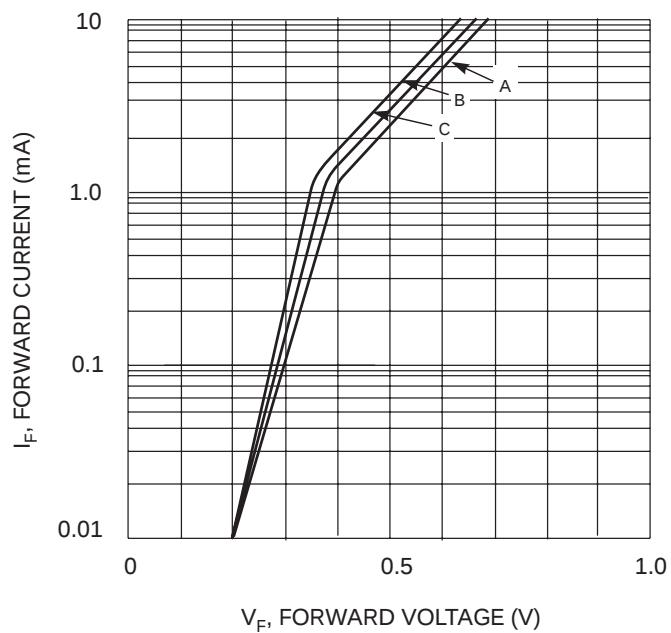


Fig. 1, Typical Forward Characteristic Variations for Primary Conduction

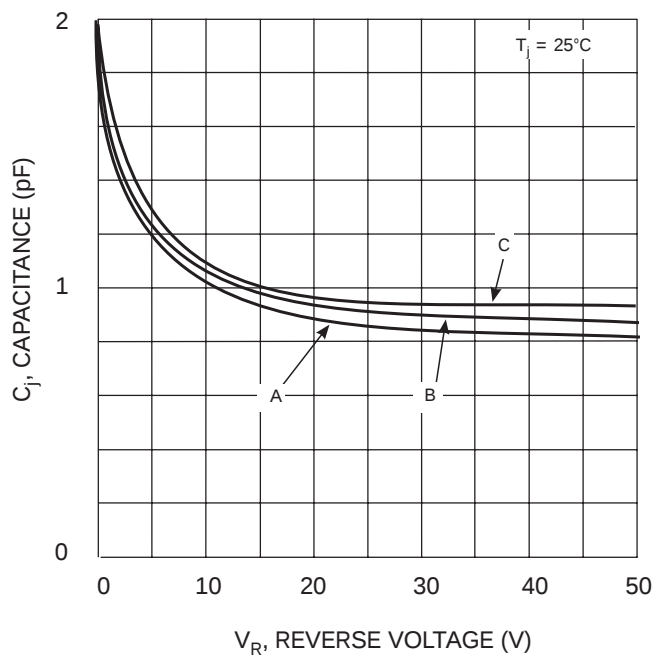


Fig. 2, Typ. Junction Capacitance vs Reverse Voltage