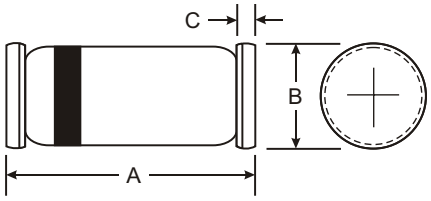
LL4154

SURFACE MOUNT FAST SWITCHING DIODE

Features

- Fast Switching Speed
- Suitable for General Logic Applications
- High Conductance



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

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.)

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	LL4154	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	35	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	25	V
RMS Reverse Voltage	$V_{R(RMS)}$	18	V
Average Rectified Output Current (Note 1)	I_O	150	mA
Non-Repetitive Peak Forward Surge Current @ t ≤ 1.0s @ t = 1.0μs	I_{FSM}	0.5 2.0	A
Power Dissipation (Note 1)	P_d	500	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	300	K/W
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 Forward Voltage Drop	V_{FM}	—	1.0	V	I_F = 30mA
Maximum Peak Reverse Current	I_{RM}	—	100	nA μA	V_R = 25V V_R = 25V, T_j = 150°C
Junction Capacitance	C_j	—	4.0	pF	V_R = 0V, f = 1.0MHz
Reverse Recovery Time	t_{rr}	—	4.0	ns	I_F = I_R = 10mA, I_{rr} = 0.1 x I_R, R_L = 100Ω

Note: 1. Valid provided that electrodes are kept at ambient temperature.

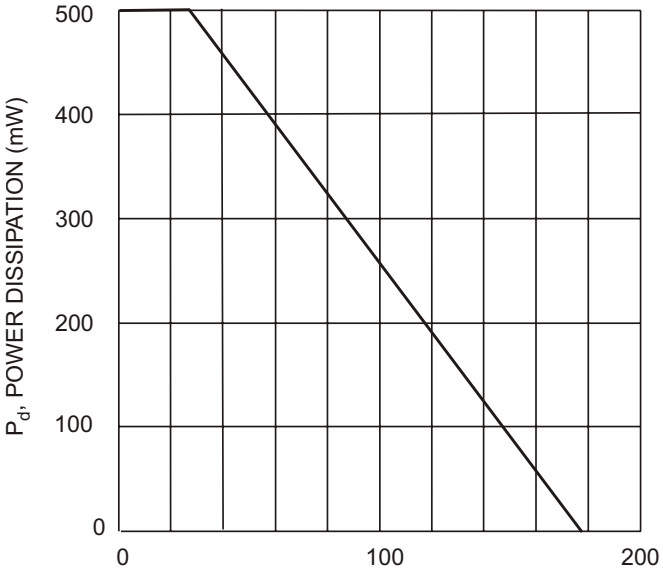


Fig. 1 Power Derating Curve

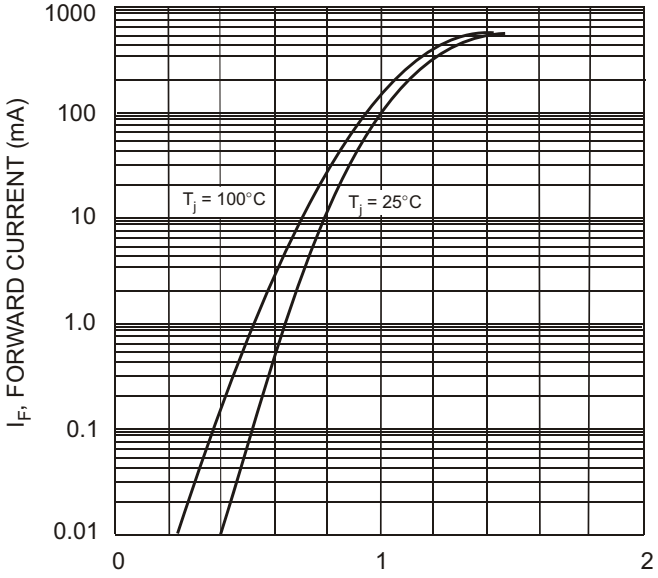


Fig. 2 Forward Characteristics

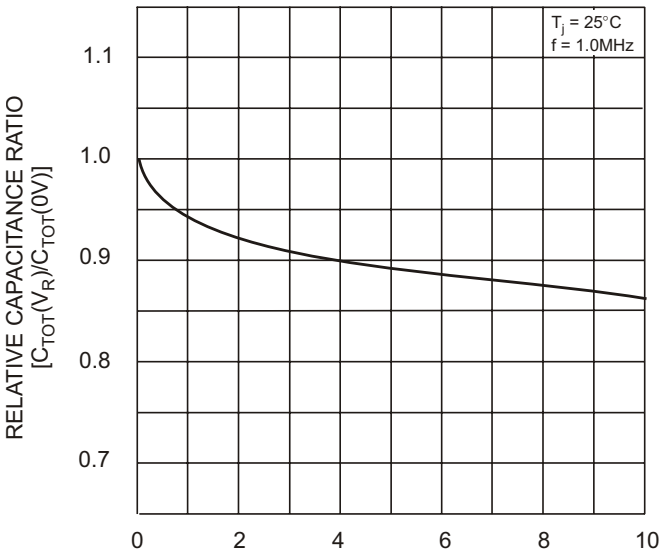


Fig. 3 Relative Capacitance Variation

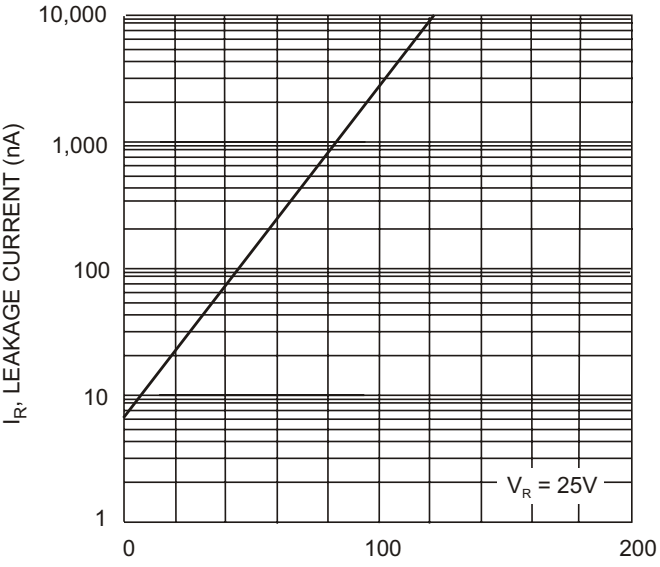


Fig. 4 Leakage Current vs Junction Temperature