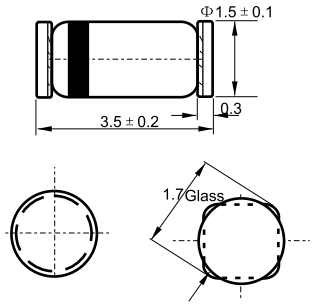
LL4150

Fast Switching Surface Mount Diode

MINI MELF



Dimension in millimeters

Features

- Ideal for Fast Logic Applications
- Ultra Fast Switching
- High Reliability
- High Conductance

Mechanical Data

- Case: MiniMELF, Glass
- Marking: Cathode Band Only
- Polarity: Cathode Band
- Weight: 0.12 grams (approx.)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Characteristic	Symbol	LL4150	Unit
Non-Repetitive Peak Reverse Voltage @ 5.0μA	V_{RM}	75	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	V
Forward Continuous Current (Note 1)	I_{FM}	400	mA
Average Rectified Output Current (Note 1)	I_O	200	mA
Repetitive Peak Forward Current (Note 1)	I_{FRM}	600	mA
Non-Repetitive Peak Forward Surge Current @ t ≤ 1.0s @ t = 1.0μs	I_{FSM}	1.0 4.0	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 +200	°C

Electrical Characteristics

Characteristic	Symbol	Min	Max	Unit	Test Condition
Maximum Forward Voltage Drop	V_{FM}	0.54 0.66 0.76 0.82 0.87	0.62 0.74 0.86 0.92 1.00	V	I_F = 1.0mA I_F = 10mA I_F = 50mA I_F = 100mA I_F = 200mA
Maximum Peak Reverse Current	I_{RM}	—	100	nA μA	T_A = 25°C T_A = 150°C
Junction Capacitance	C_j	—	2.5	pF	V_R = 0V, f = 1.0MHz
Reverse Recovery Time	t_{rr}	—	4.0	ns	I_F = I_R = 200mA, I_{rr} = 0.1 x I_R, R_L = 100Ω
Forward Recovery Time	t_{fr}	—	10	ns	I_F = 200mA, V_{FR} = 1.0V

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