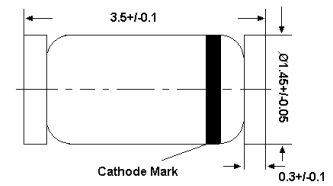


LL4151

Silicon Epitaxial Planar Switching Diode

LL-34



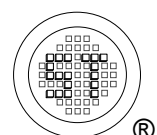
Glass case MiniMELF
Dimensions in mm

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Maximum Repetitive Reverse Voltage	V_{RRM}	75	V
Reverse Voltage	V_R	50	V
Average Forward Current	$I_{F(AV)}$	150	mA
Forward Current	I_F	300	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Peak Forward Surge Current ($t_p = 1 \mu\text{s}$)	I_{FSM}	2	A
Power Dissipation	P_{tot}	500	mW
Operating Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 175	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Breakdown Voltage at $I_R = 5 \mu\text{A}$	$V_{(BR)}$	75	-	V
Forward Voltage at $I_F = 50 \text{ mA}$	V_F	-	1	V
Reverse Current at $V_R = 50 \text{ V}$ at $V_R = 50 \text{ V}$, $T_j = 150^\circ\text{C}$	I_R I_R	- -	50 50	nA μA
Total Capacitance at $V_R = 0$, $f = 1 \text{ MHz}$	C_T	-	2	pF
Reverse Recovery Time at $I_F = 10 \text{ mA}$, $V_R = 6 \text{ V}$, $R_L = 100 \Omega$, $i_R = 0.1 \times I_R$	t_{rr1}	-	2	ns
Reverse Recovery Time at $I_F = I_R = 10 \text{ mA}$, $i_R = 1 \text{ mA}$	t_{rr2}	-	4	ns



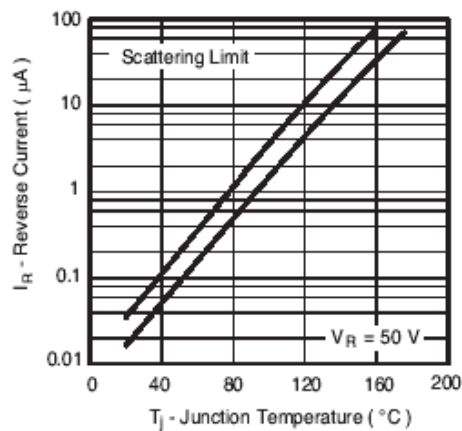


Fig. 1 Reverse Current vs. Junction Temperature

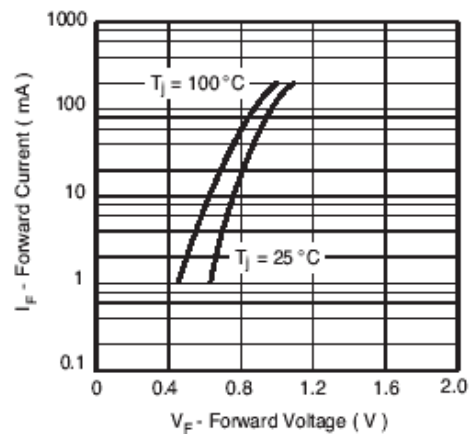


Fig. 2 Forward Current vs. Forward Voltage

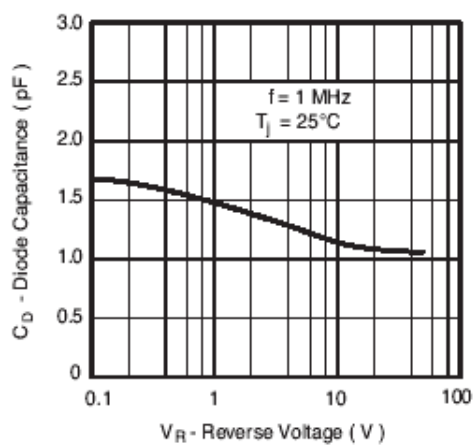


Fig. 3 Diode Capacitance vs. Reverse Voltage

