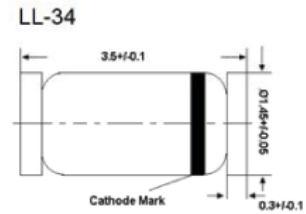


**Silicon Epitaxial Planar Switching Diode**


Glass case MiniMELF  
Dimensions in mm

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

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 ( $t_p = 1\text{ }\mu\text{s}$ )	$I_{FSM}$	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  $T_a = 25\text{ }^\circ\text{C}$** 

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

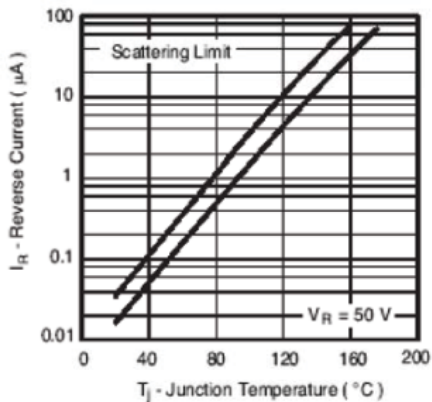


Fig. 1 Reverse Current vs. Junction Temperature

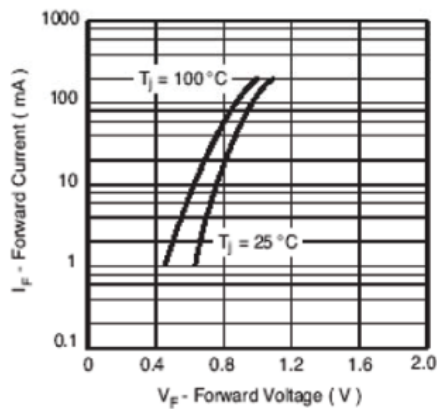


Fig. 2 Forward Current vs. Forward Voltage

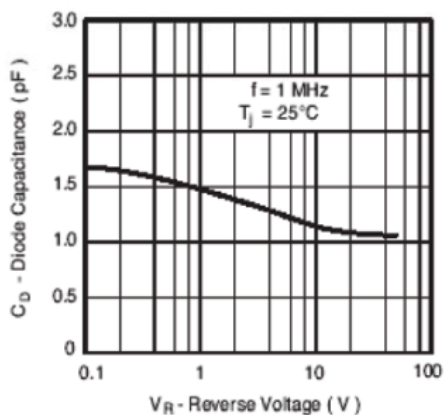


Fig. 3 Diode Capacitance vs. Reverse Voltage