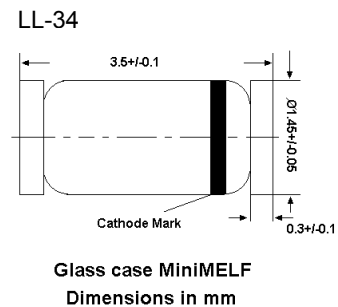


LL4153

Silicon Epitaxial Planar Switching Diode

Applications

- High-speed switching

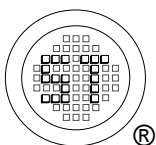


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Maximum Repetitive Reverse Voltage	V_{RRM}	75	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current $t = 1\text{ s}$ $t = 1\text{ }\mu\text{s}$	I_{FSM}	1 4	A
Power Dissipation	P_{tot}	500	mW
Operating Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 175	$^\circ\text{C}$

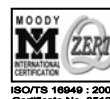
Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 5\text{ }\mu\text{A}$	V_R	75	-	V
Forward Voltage at $I_F = 0.1\text{ mA}$ at $I_F = 0.25\text{ mA}$ at $I_F = 1\text{ mA}$ at $I_F = 2\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 20\text{ mA}$	V_F	0.45 0.49 0.55 0.6 0.69 0.72	0.51 0.55 0.61 0.67 0.76 0.86	V
Reverse Current at $V_R = 50\text{ V}$	I_R	-	50	nA
Total Capacitance at $V_R = 0$, $f = 1\text{ MHz}$	C_T	-	2	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$, $V_R = 6\text{ V}$, $R_L = 100\text{ }\Omega$, $I_{rr} = 1\text{ mA}$	t_{rr1}	-	2	ns
Reverse Recovery Time at $I_F = I_R = 10\text{ mA}$, $R_L = 100\text{ }\Omega$, $I_{rr} = 1\text{ mA}$	t_{rr2}	-	4	ns



SEMTECH ELECTRONICS LTD.

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