

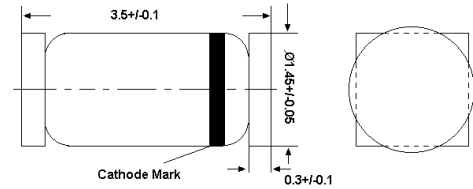
LS4150

Silicon Epitaxial Planar Switching Diode

Applications

- High speed switch and general purpose use in com-puter and industrial applications

LS-34



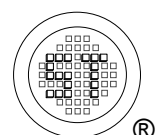
QuadroMELF
Dimensions in mm

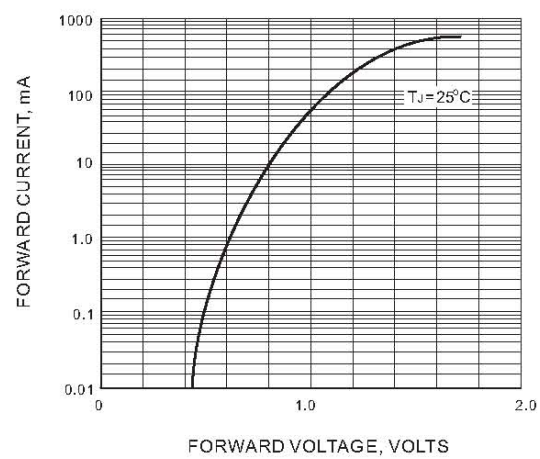
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	50	V
Reverse Voltage	V_R	50	V
Average Rectified Forward Current	$I_{F(AV)}$	300	mA
Peak Forward Current	I_{FM}	600	mA
Non-Repetitive Peak Forward Surge Current (at $t = 1 \mu\text{s}$)	I_{FSM}	4	A
Power Dissipation	P_{tot}	500	mW
Junction temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to +175	$^\circ\text{C}$

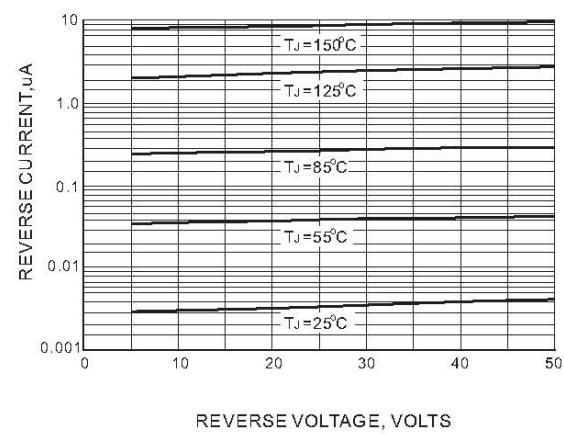
Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 1 \text{ mA}$ at $I_F = 10 \text{ mA}$ at $I_F = 50 \text{ mA}$ at $I_F = 100 \text{ mA}$ at $I_F = 200 \text{ mA}$	V_F	0.54 0.66 0.76 0.82 0.87	0.62 0.74 0.86 0.92 1	V
Reverse Current at $V_R = 50 \text{ V}$ at $V_R = 50 \text{ V}, T_j = 150^\circ\text{C}$	I_R	- -	100 100	nA μA
Capacitance at $V_R = 0, f = 1 \text{ MHz}$	C_{tot}	-	4	pF
Reverse Recovery Time at $I_F = 10 \text{ mA}$ to $I_R = 1 \text{ mA}$, $I_{rr} = 0.1 \times I_R$, $V_R = 6 \text{ V}$, $R_L = 100 \Omega$	t_{rr}	-	4	ns

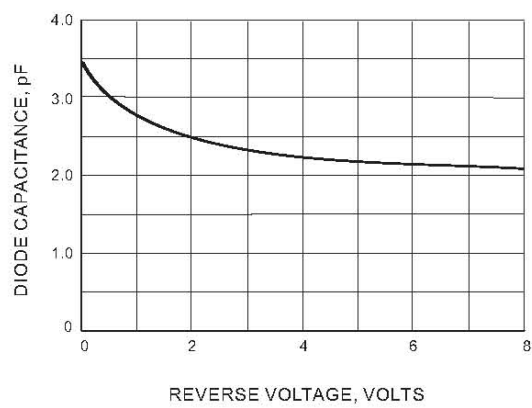




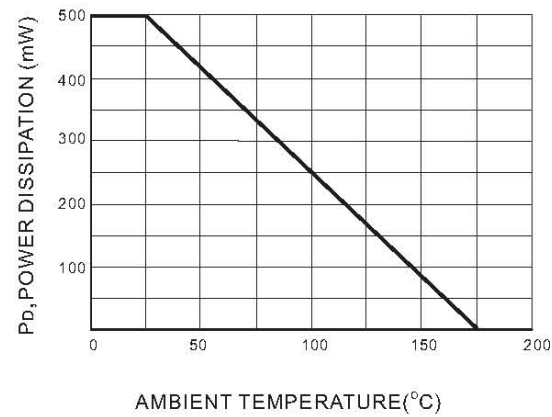
FORWARD VOLTAGE



LEAKAGE CURRENT



TYPICAL CAPATICANCE



POWER DERATING

