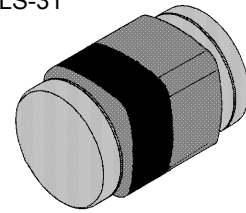


MCL4448

Silicon Epitaxial Planar Switching Diode

Fast switching diode in MiniMELF case especially suited for automatic surface mounting.

LS-31



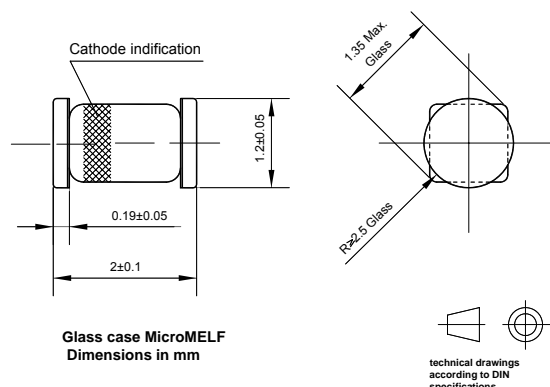
Glass Case MicroMELF

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

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Average Rectified Forward Current	$I_{F(AV)}$	150	mA
Surge Forward Current at $t < 1\text{ s}$	I_{FSM}	500	mA
Power Dissipation	P_{tot}	500	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 175	$^\circ\text{C}$

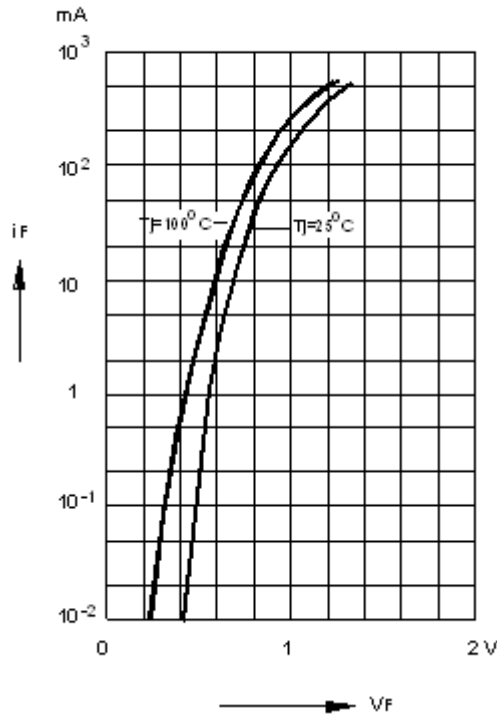
Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 5\text{ mA}$ at $I_F = 100\text{ mA}$	V_F	0.62 -	0.72 1	V
Reverse Leakage Current at $V_R = 20\text{ V}$ at $V_R = 75\text{ V}$ at $V_R = 20\text{ V}, T_j = 150\text{ }^\circ\text{C}$	I_R I_R I_R	- - -	25 5 50	nA μA μA
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	100	-	V
Capacitance at $V_R = 0, f = 1\text{ MHz}$	C_{tot}	-	4	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$ to $I_R = 1\text{ mA}, V_R = 6\text{ V}, R_L = 100\text{ }\Omega$	t_{rr}	-	4	ns

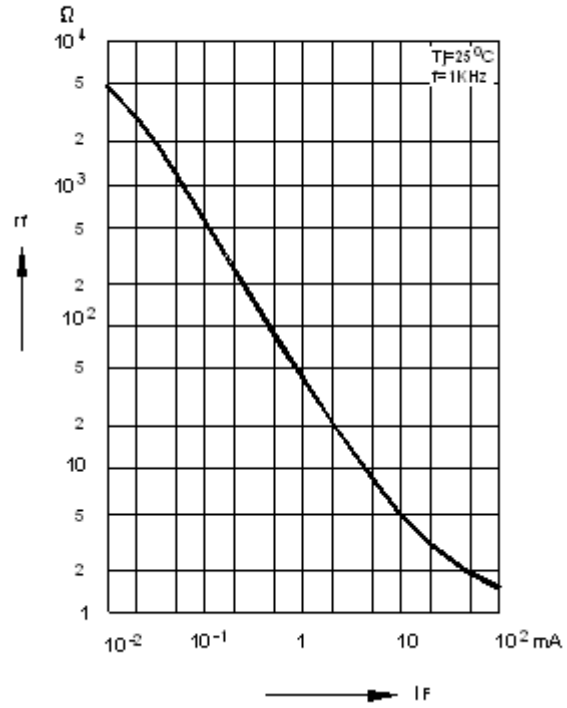


MCL4448

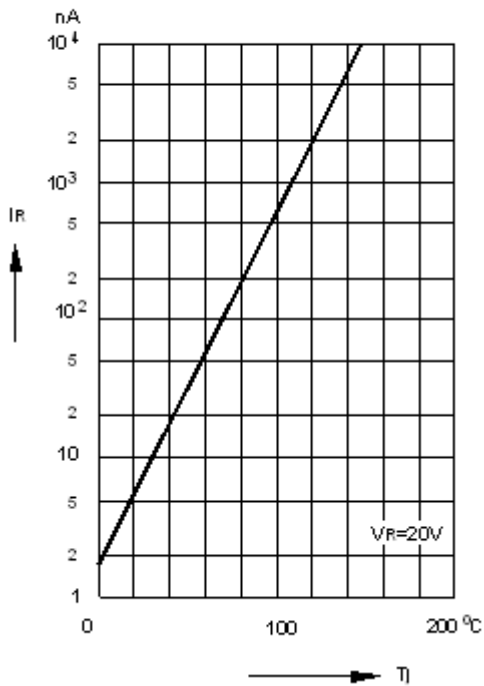
Forward characteristics



Dynamic forward resistance versus forward current



Leakage current versus junction temperature



Relative capacitance versus reverse voltage

