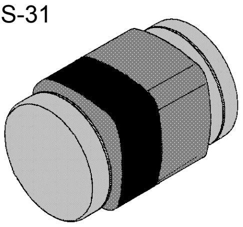
MCL4448

Silicon Epitaxial Planar Switching Diode

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

LS-31



Glass Case MicroMELF

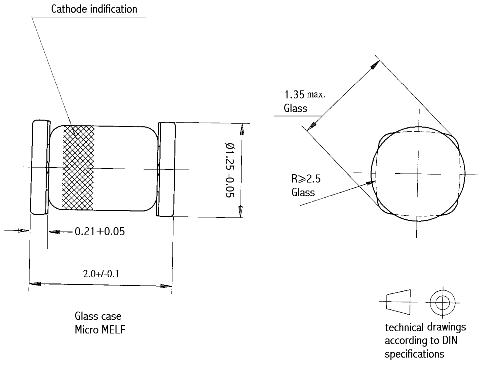
Absolute Maximum Ratings (T_a = 25 °C)

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 s	I_{FSM}	500	mA
Power Dissipation	P_{tot}	500	mW
Junction Temperature	T_j	175	°C
Storage Temperature Range	T_{stg}	- 65 to + 175	°C

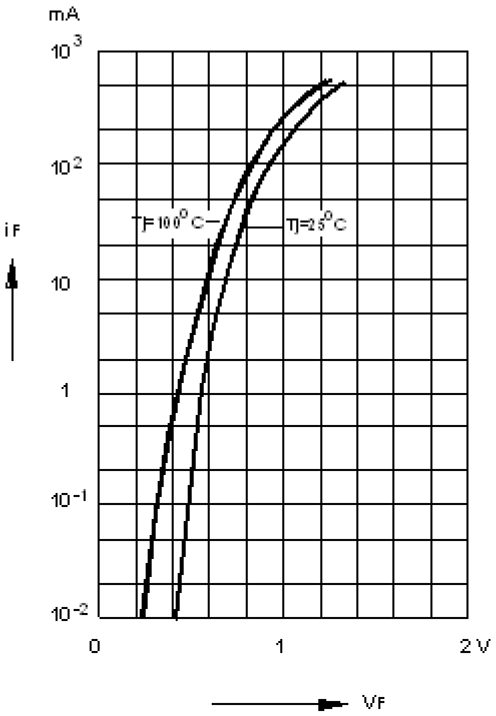
Characteristics at T_a = 25 °C

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

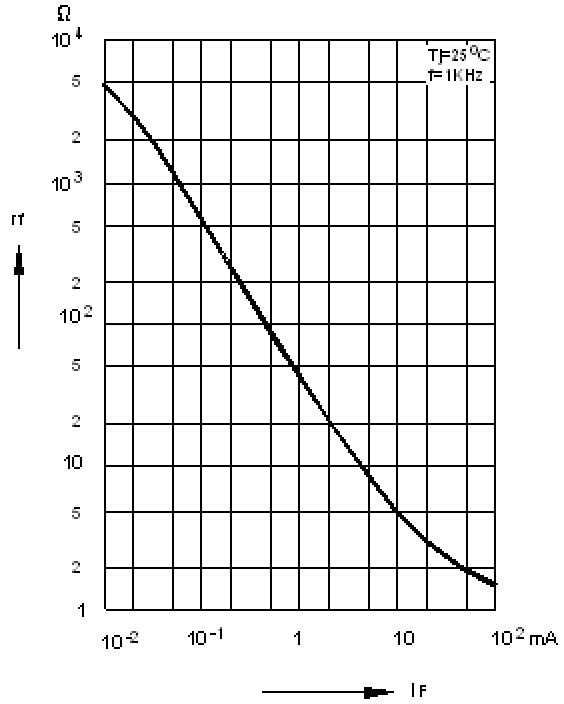
Dimensions in mm



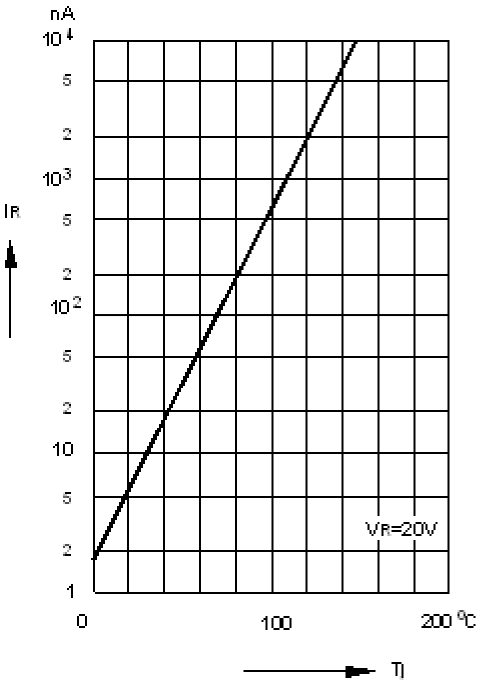
Forward characteristics



Dynamic forward resistance
versus forward current



Leakage current
versus junction temperature



Relative capacitance
versus reverse voltage