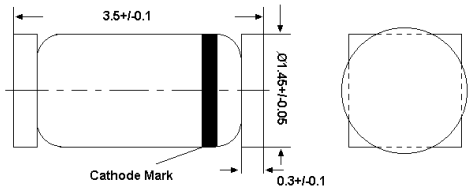
LS4448

Silicon Epitaxial Planar Switching Diode

Fast switching diode in QuadroMELF case especially suited for automatic surface mounting. Identical electrically to standard JEDEC 1N4448.

LS-34



QuadroMELF
Dimensions in mm

Absolute Maximum Ratings (T_a = 25 °C)

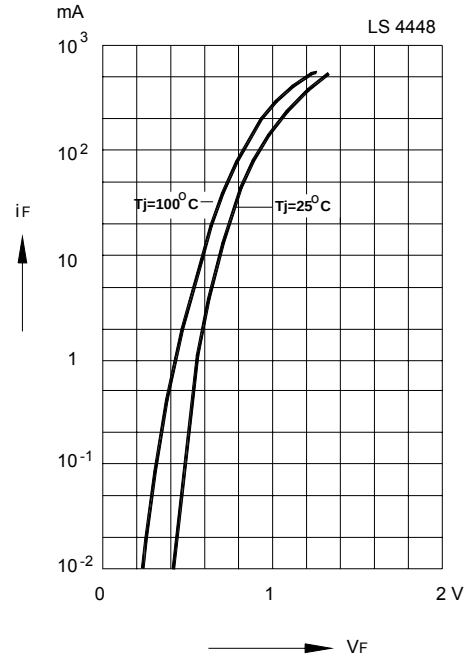
Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Average Rectified Forward Current	$I_{F(AV)}$	150	mA
Surge Forward Current at t < 1 s	I_{FSM}	500	mA
Power Dissipation	P_{tot}	500 [1)]	mW
Junction Temperature	T_j	175	°C
Storage Temperature Range	T_{stg}	- 65 to +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

[1)] Valid provided that electrodes are kept at ambient temperature.

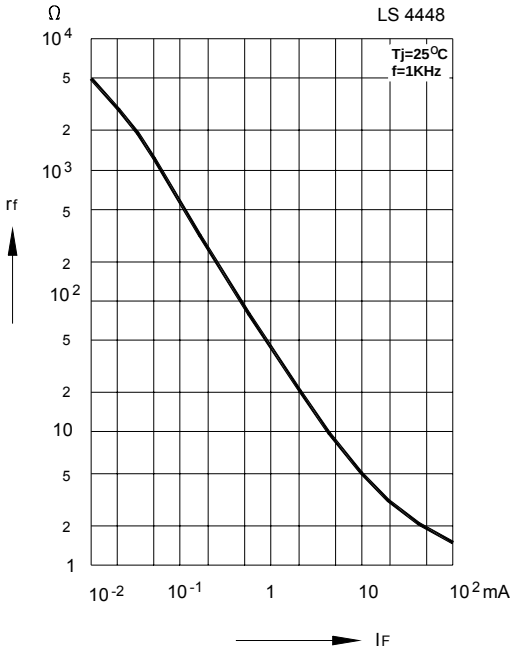
Characteristics at T_a = 25 °C

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 Current at V_R = 20 V at V_R = 75 V	I_R	- -	25 5	nA µA
Reverse Breakdown Voltage tested with 100 µA Pulses	$V_{(BR)R}$	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

Forward characteristics

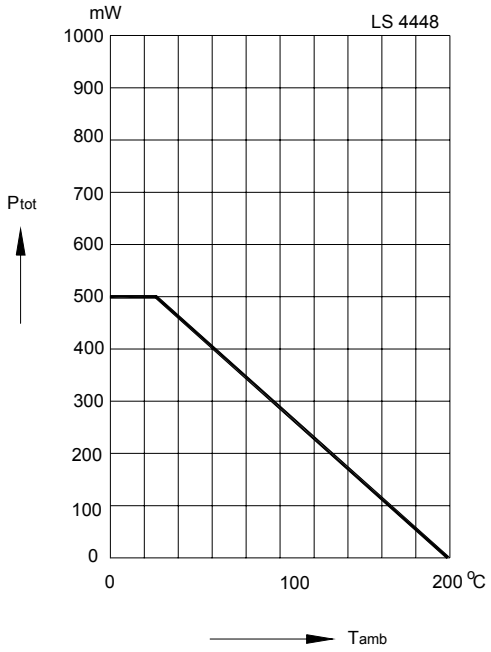


Dynamic forward resistance versus forward current

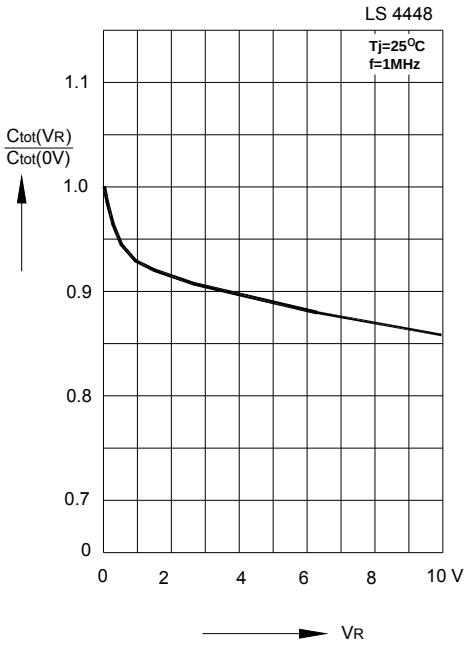


Admissible power dissipation versus ambient temperature

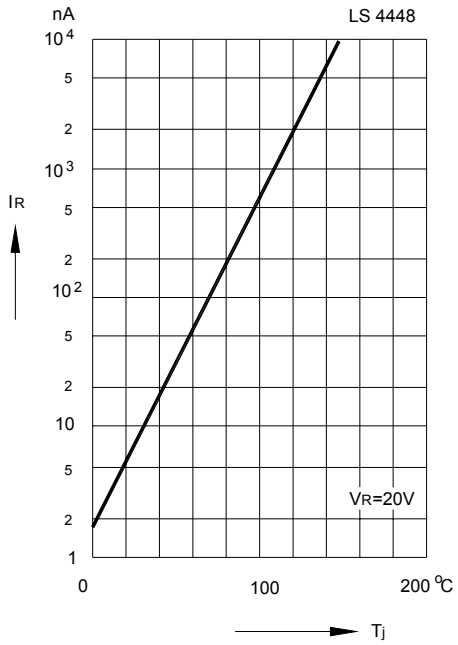
Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature

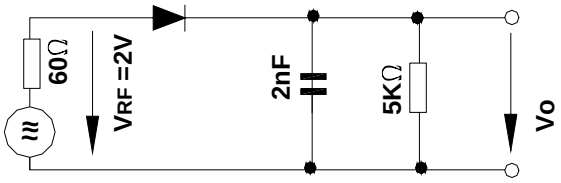


Relative capacitance versus reverse voltage



Leakage current
versus junction temperature





Rectification Efficiency Measurement Circuit

Admissible repetitive peak forward current
versus pulse duratin
Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature

