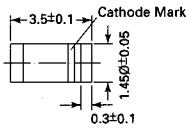
LL4448

Silicon Expitaxial Planar Diode
fast switching diode in MiniMELF case especially suited for automatic surface mounting.
Identical electrically to standard JEDEC 1N4448



Glass case MiniMELF

Weight approx. 0.05g
Dimensions in mm

These diodes are delivered taped.
Details see "Taping".

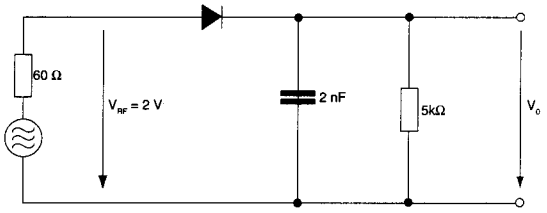
Absolute Maximum Ratings (T_a = 25 °C)

	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Rectified Current (Average) Half Wave Rectification with Resist. Load at T_{amb} = 25 °C and f ≥ 50 Hz	I_0	150 [1]	mA
Surge Forward Current at t < 1 s and T_j = 25 °C	I_{FSM}	500	mA
Power Dissipation at T_{amb} = 25 °C	P_{tot}	500 [1]	mW
Junction Temperature	T_j	175	°C
Storage Temperature Range	T_S	-65 to + 175	°C
[1] Valid provided that electrodes are kept at ambient temperature			

Characteristics at T_j = 25 °C

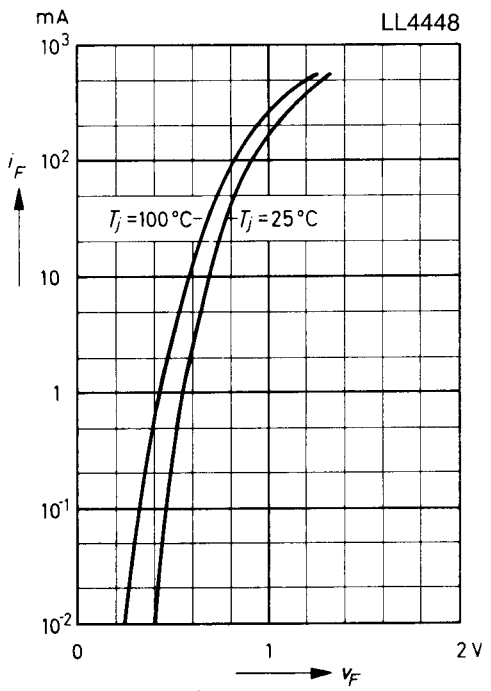
	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at I_F = 5 mA at I_F = 100 mA	 V_F V_F	 0.62 -	 - -	 0.72 1	 V V
Leakage Current at V_R = 20 V at V_R = 75 V at V_R = 20 V, T_j = 150 °C	 I_R I_R I_R	 - - -	 - - -	 25 5 50	 nA µA µA
Reverse Breakdown Voltage tested with 100 µA Pulses	$V_{(BR)R}$	100	-	-	V
Capacitance at V_F = V_R = 0	C_{tot}	-	-	4	pF
Reverse Recovery Time from I_F = 10 mA to I_R = 1 mA, V_R = 6 V, R_L = 100 Ω,	t_{rr}	-	-	4	ns
Termal Resistance Junction to Ambient Air	R_{thA}	-	-	0.35[1)]	K/mW
Rectification Efficiency at f = 100 MHz, V_{RF} = 2 V	η_V	0.45	-	-	ns

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

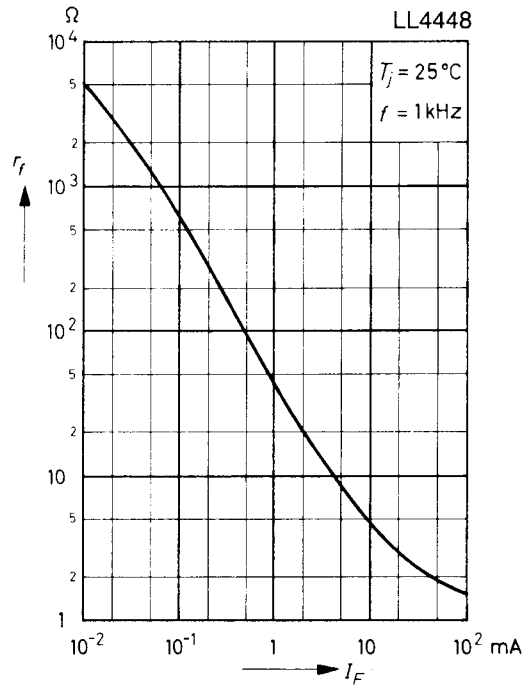


Rectification Efficiency Measurement Circuit

Forward characteristics

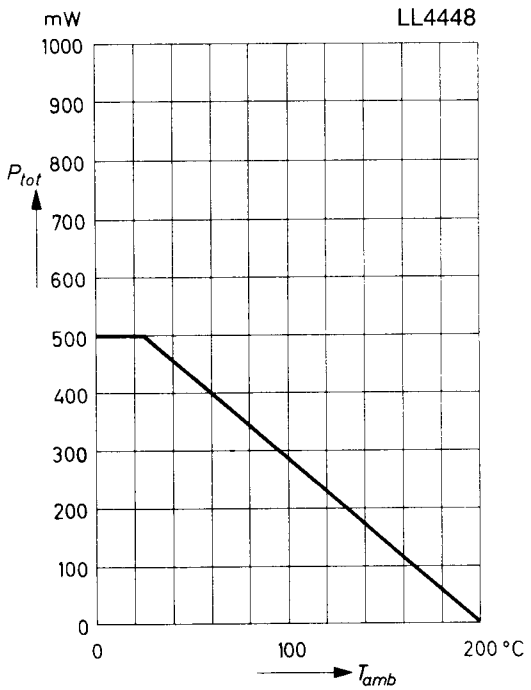


Dynamic forward resistance versus forward current

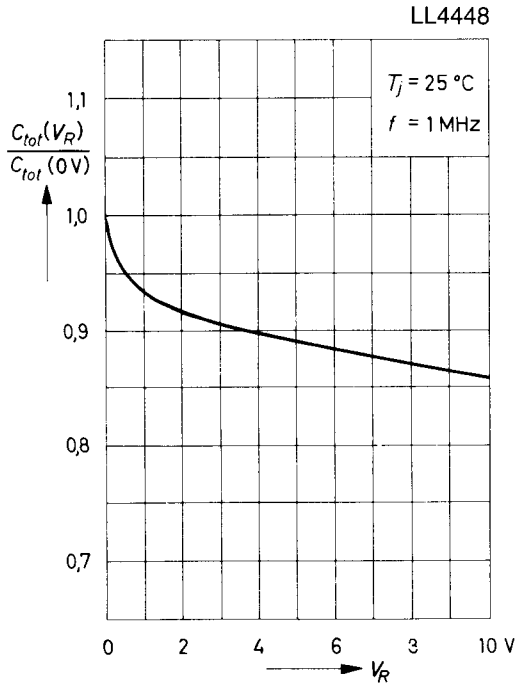


Admissible power dissipation versus ambient temperature

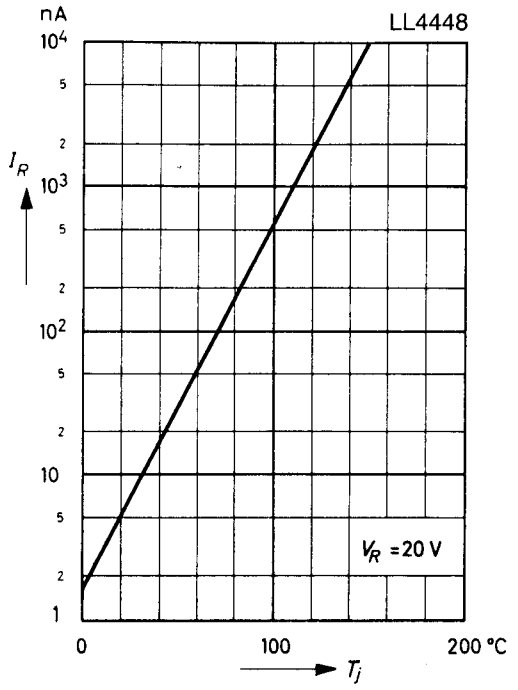
Valid provided that electrodes are kept at ambient temperature



Relative capacitance versus reverse voltage



Leakage current versus junction temperature



Admissible repetitive peak forward current versus pulse duration

Valid provided that electrodes are kept at ambient temperature