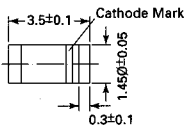


Silicon Expitaxial Planar Diode

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

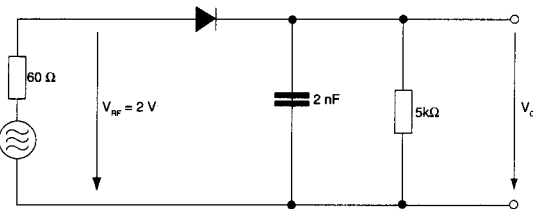
¹⁾ Valid provided that electrodes are kept at ambient temperature



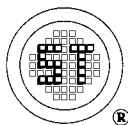
Characteristics at T_j = 25 °C

	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
Thermal 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

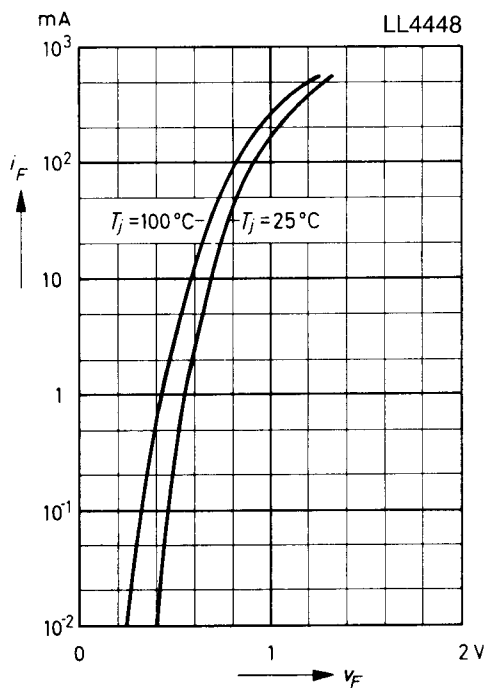
¹⁾ Valid provided that electrodes are kept at ambient temperature



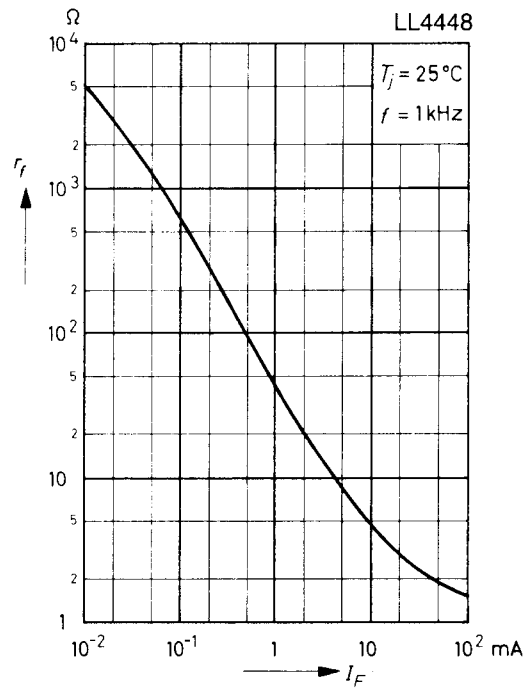
Rectification Efficiency Measurement Circuit



Forward characteristics

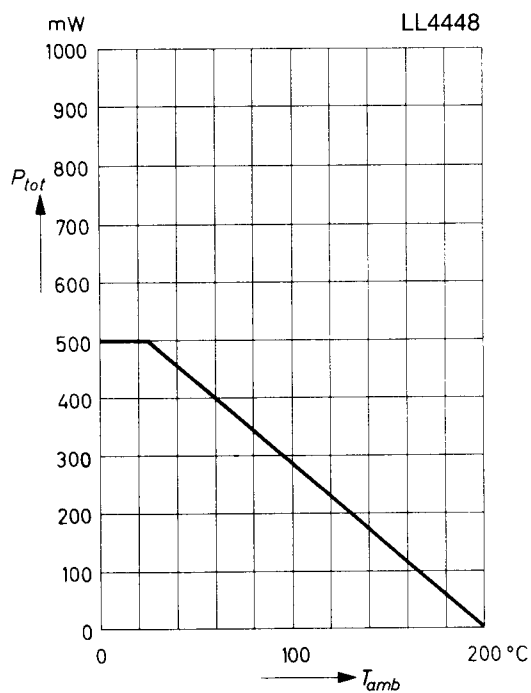


Dynamic forward resistance versus forward current

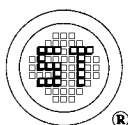
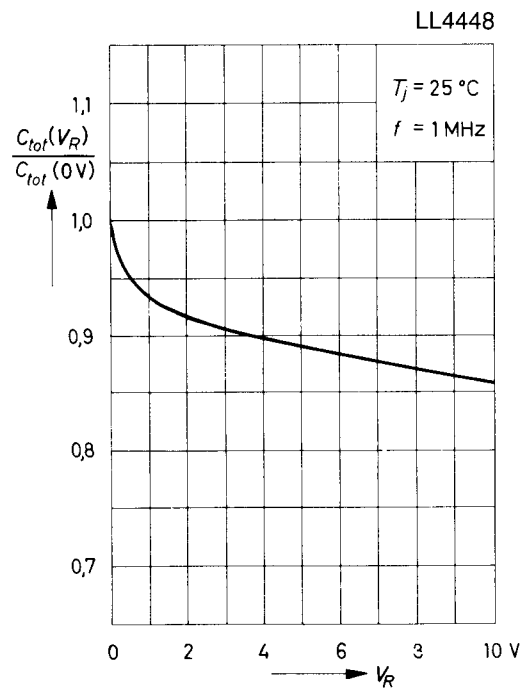


Admissible power dissipation versus ambient temperature

Valid provided that electrodes are kept at ambient temperature



Relative capacitance versus reverse voltage

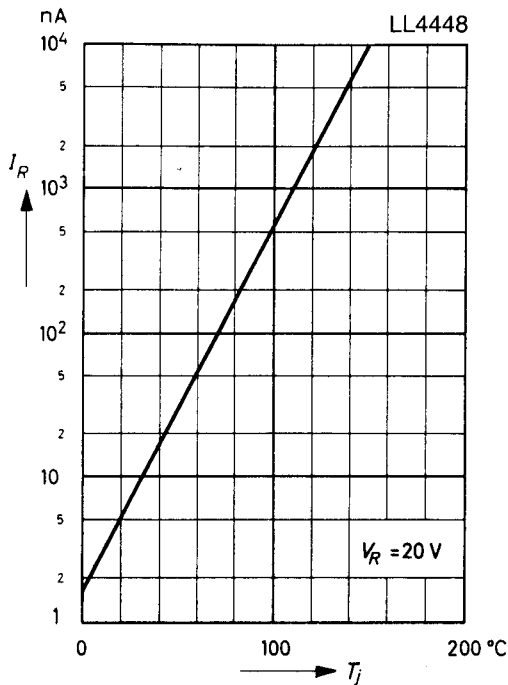


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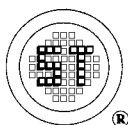
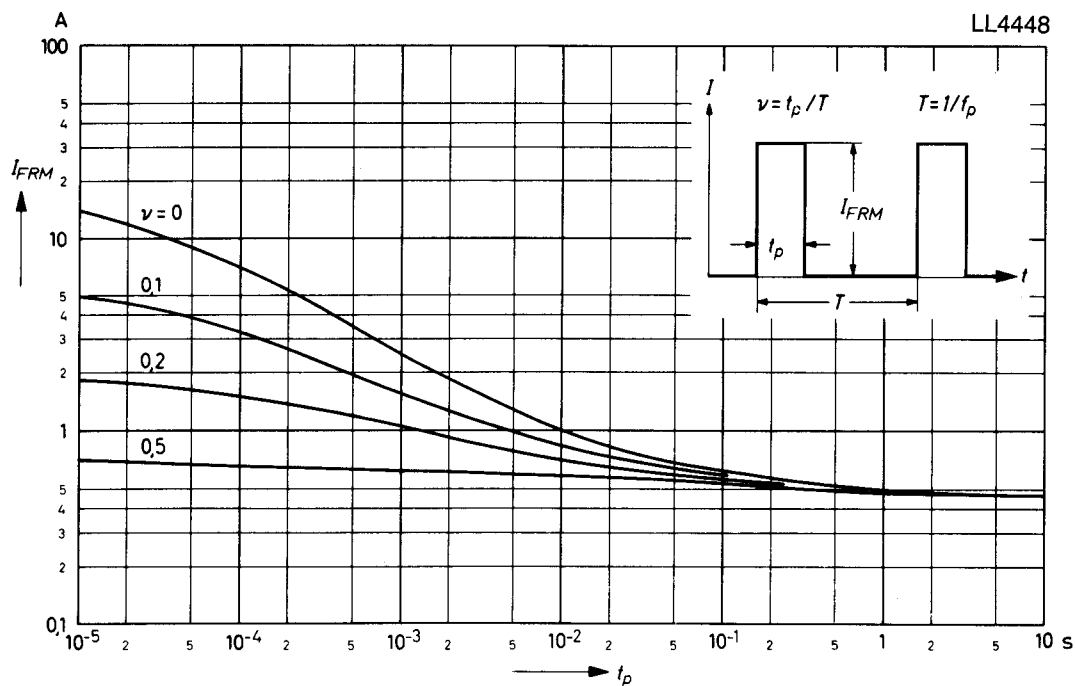


**Leakage current
versus junction temperature**



Admissible repetitive peak forward current versus pulse duration

Valid provided that electrodes are kept at ambient temperature



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