

LS4448

SILICON EPITAXIAL PLANAR DIODE

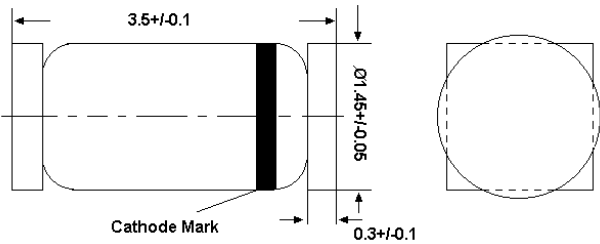
fast switching diode in MiniMELF case especially suited for automatic surface mounting.

Identical electrically to standard JEDEC 1N4448

These diodes are delivered taped.

Details see “Taping”.

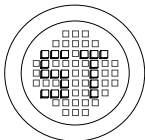
LS-34



Glass case MiniMELF

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 _O	150 ¹⁾	mA
Surge Forward Current at t<1s and T _j = 25°C	I _{FSM}	500	mA
Power Dissipation	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.			



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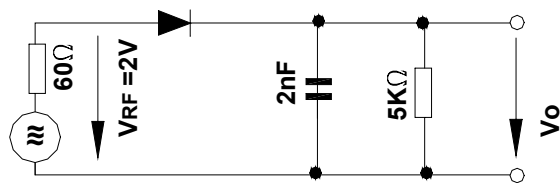
Dated : 22/08/2005

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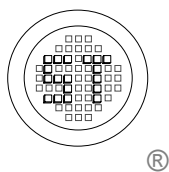
Characteristics at T_j = 25°C

	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at I _F = 5mA at I _F = 100mA	V _F	0.62	-	0.72	V
	V _F	-	-	1	V
Leakage Current at V _R = 20V at V _R = 75V at V _R = 20V, T _j = 150°C	I _R	-	-	25	nA
	I _R	-	-	5	μA
	I _R	-	-	50	μA
Reverse Breakdown Voltage tested with 100μA Pulses	V _{(BR)R}	100	-	-	V
Capacitance at V _F = V _R = 0	C _{tot}	-	-	4	pF
Reverse Recovery Time from I _F = 10mA to I _R = 1mA, V _R = 6V, R _L = 100Ω	t _{rr}	-	-	4	ns
Thermal Resistance Junction to Ambient Air	R _{thA}	-	-	0.35 ¹⁾	K/mW
Rectification Efficiency at f = 100MHz, V _{RF} = 2V	η _v	0.45	-	-	ns-

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



Rectification Efficiency Measurement Circuit

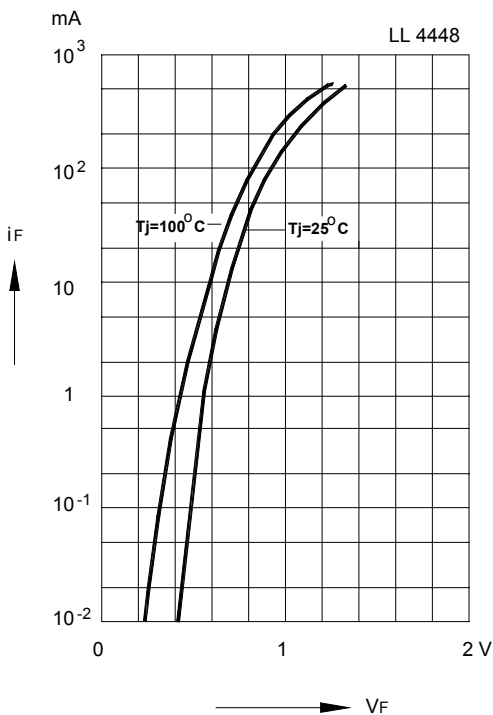


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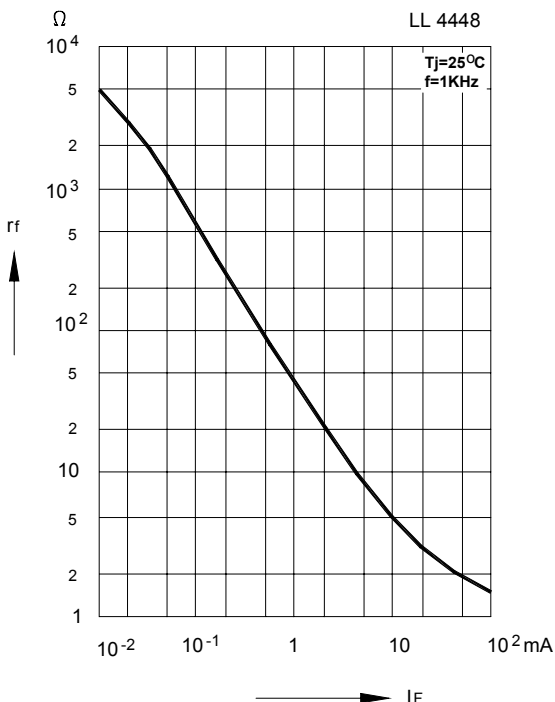


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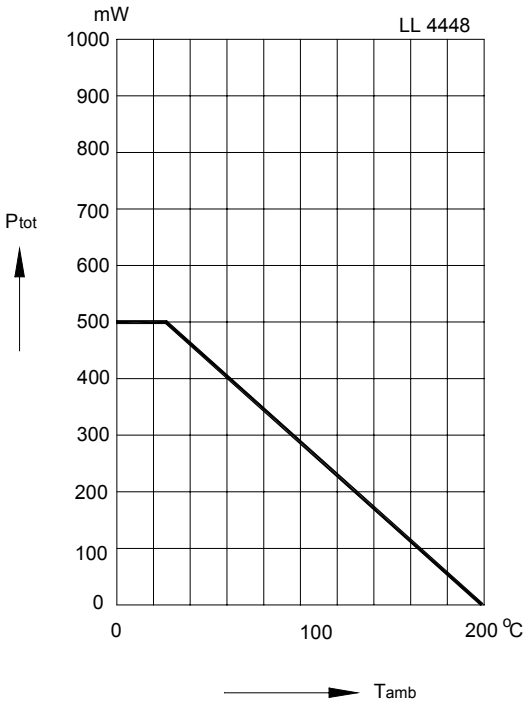
Forward characteristics



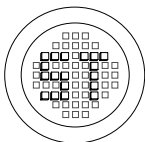
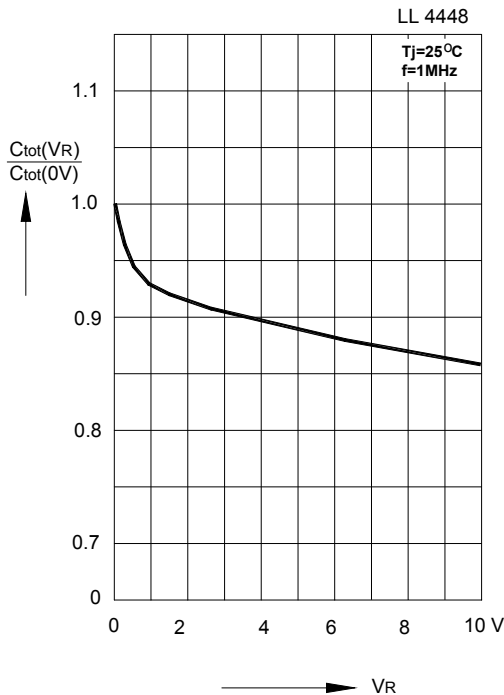
Dynamic forward resistance versus forward current



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



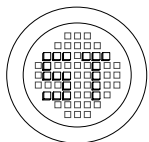
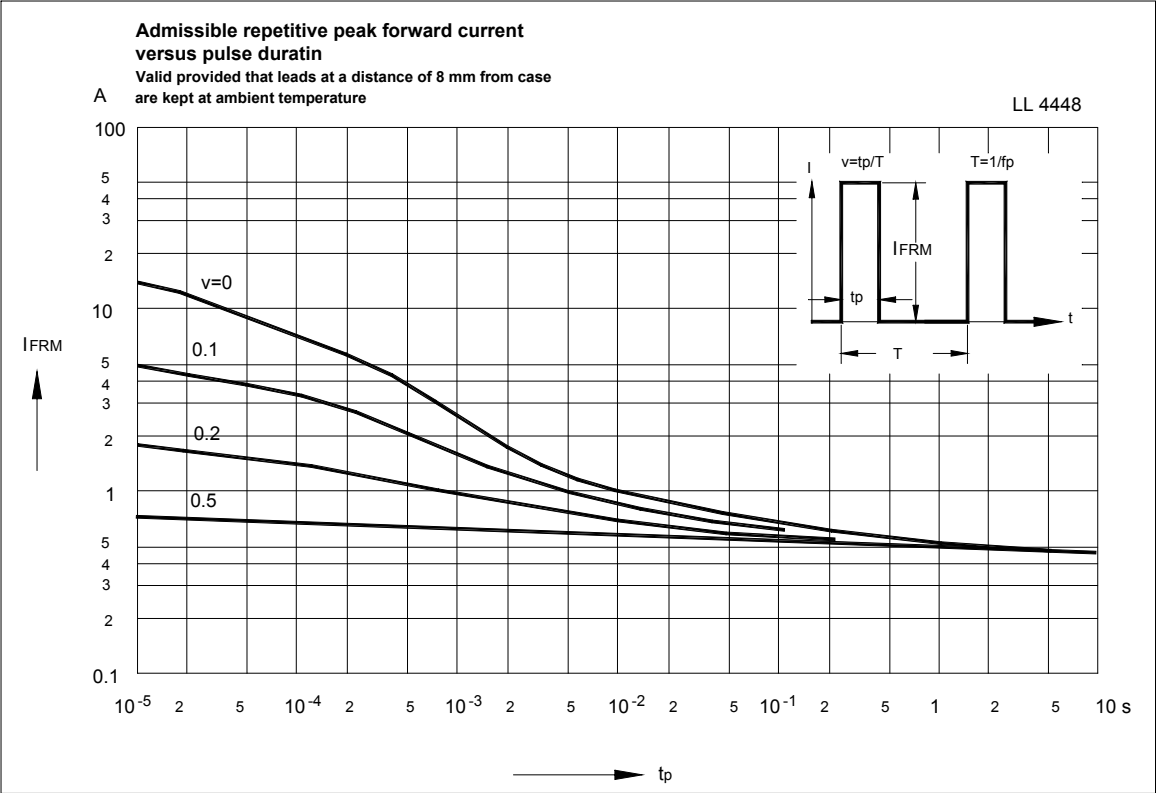
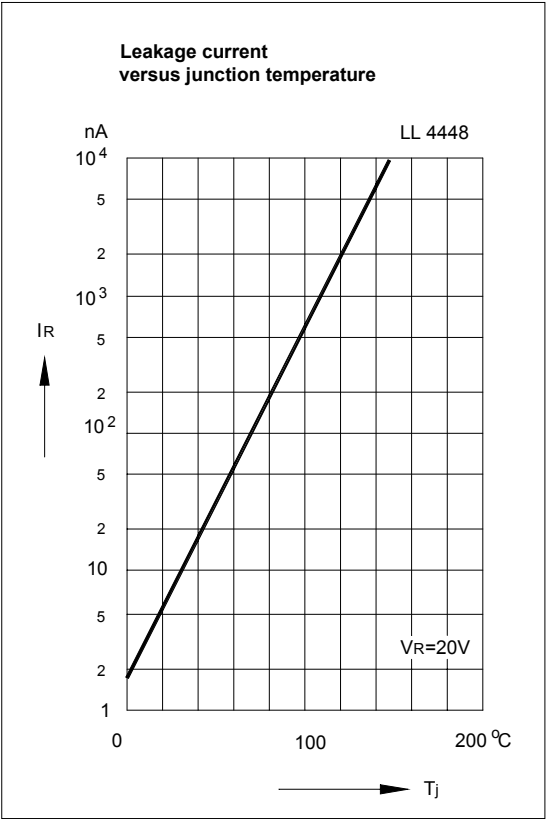
Relative capacitance versus reverse voltage



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