

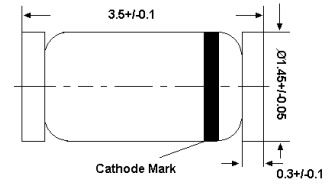
SILICON EPITAXIAL PLANAR DIODE

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".



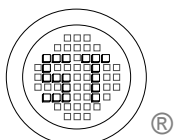
Glass case MiniMELF

Weight approx.0.05g
Dimensions in mm

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

	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 $T_{amb} = 25^\circ\text{C}$ and $f = 50\text{ Hz}$	I_O	150 ¹⁾	mA
Surge Forward Current at $t < 1\text{ s}$ and $T_j = 25^\circ\text{C}$	I_{FSM}	500	mA
Power Dissipation	P_{tot}	500 ¹⁾	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_s	-65 to +175	$^\circ\text{C}$

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



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ISO 9001:2000
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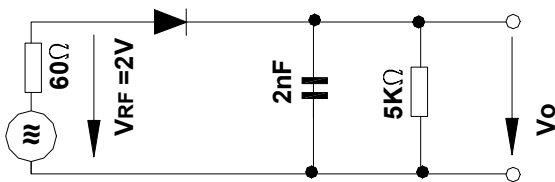
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LL4448

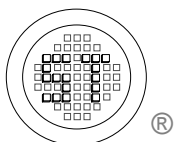
Characteristics at $T_j = 25^\circ\text{C}$

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

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



Rectification Efficiency Measurement Circuit



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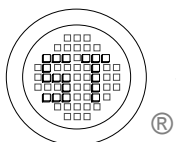
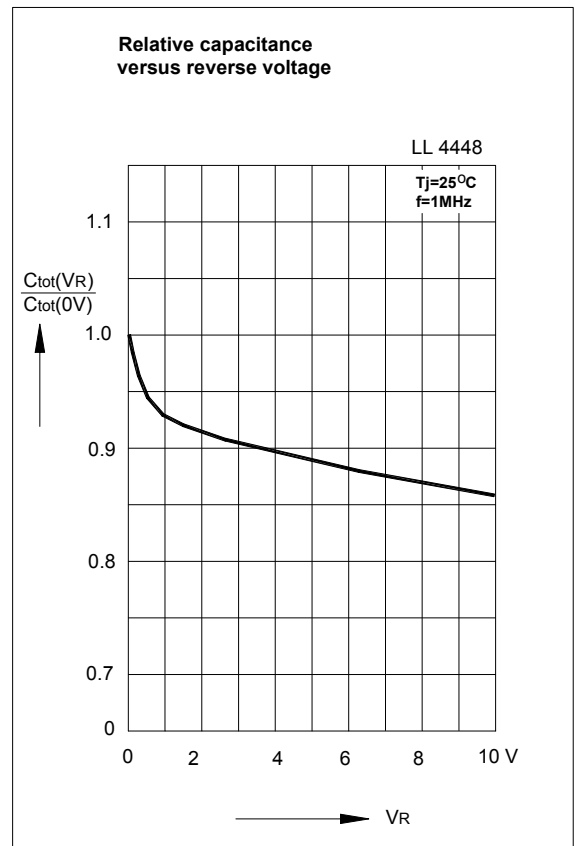
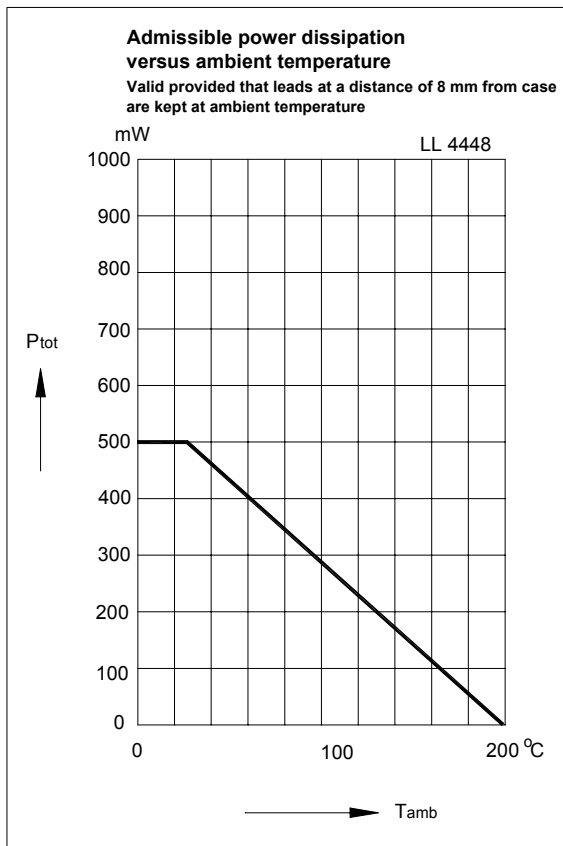
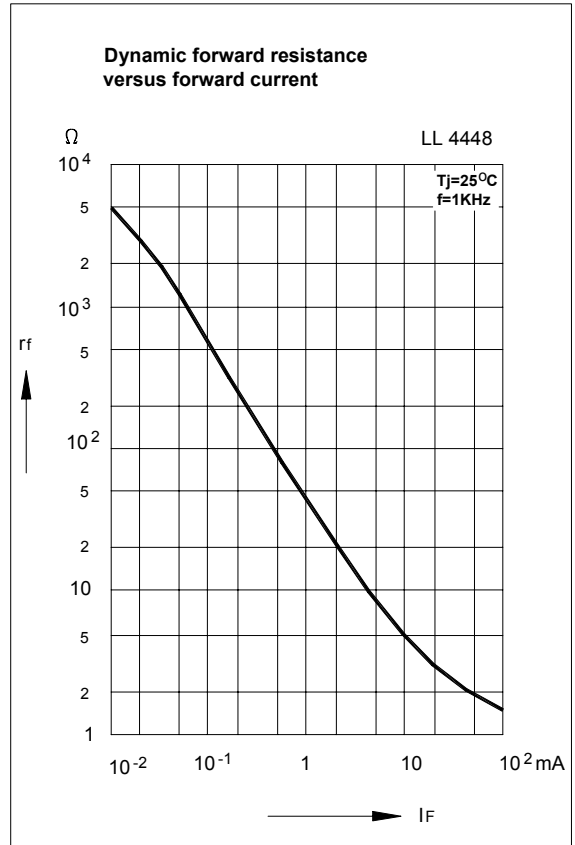
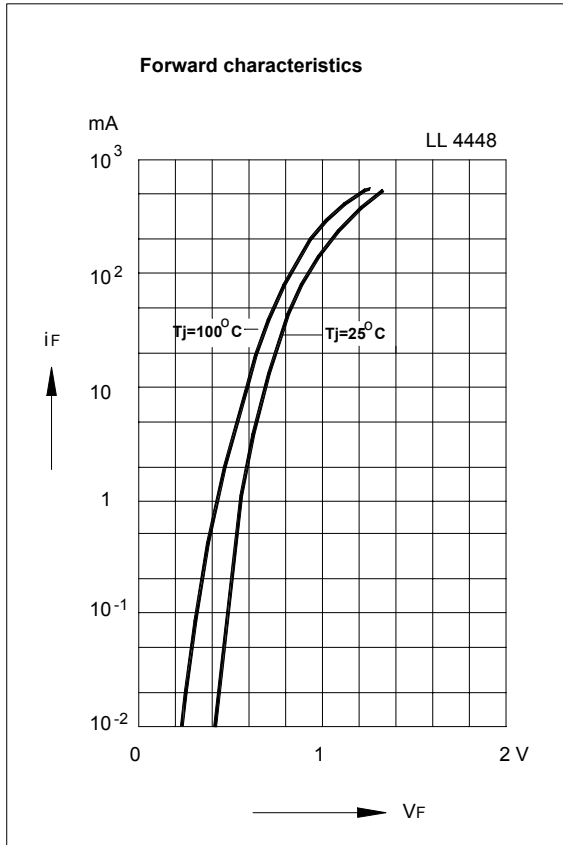
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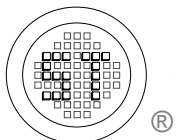
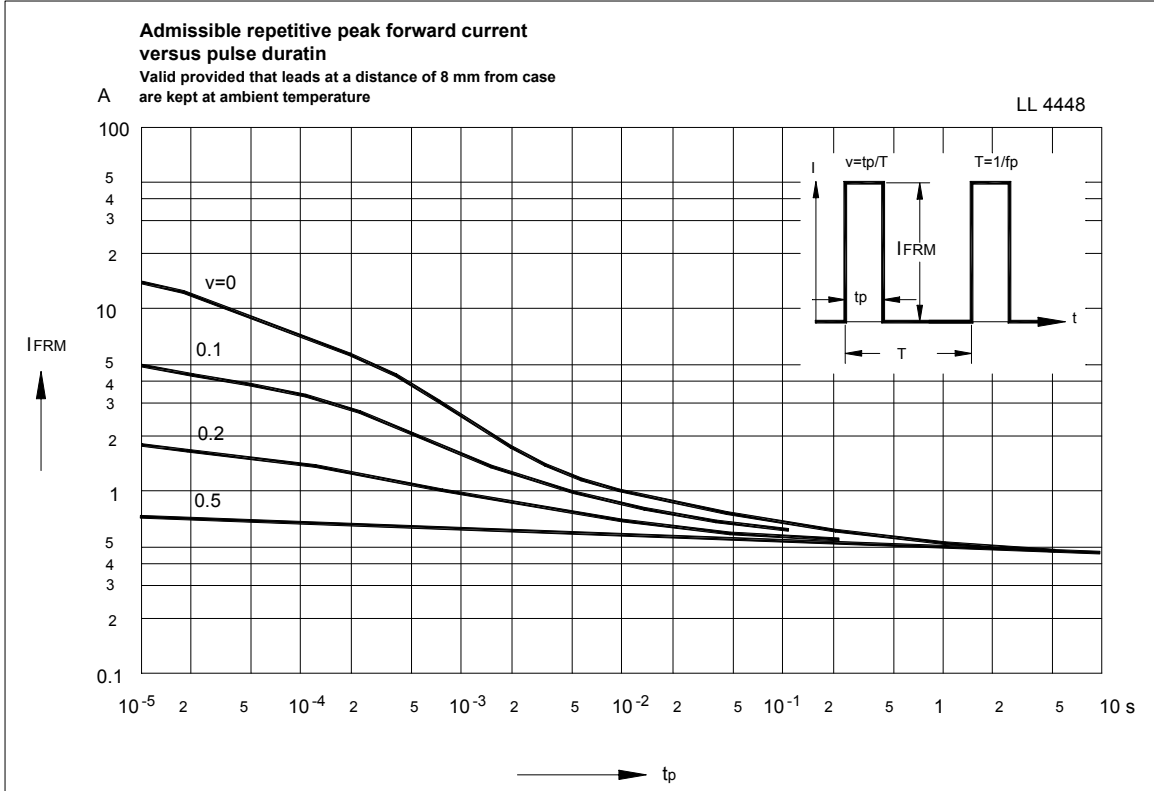
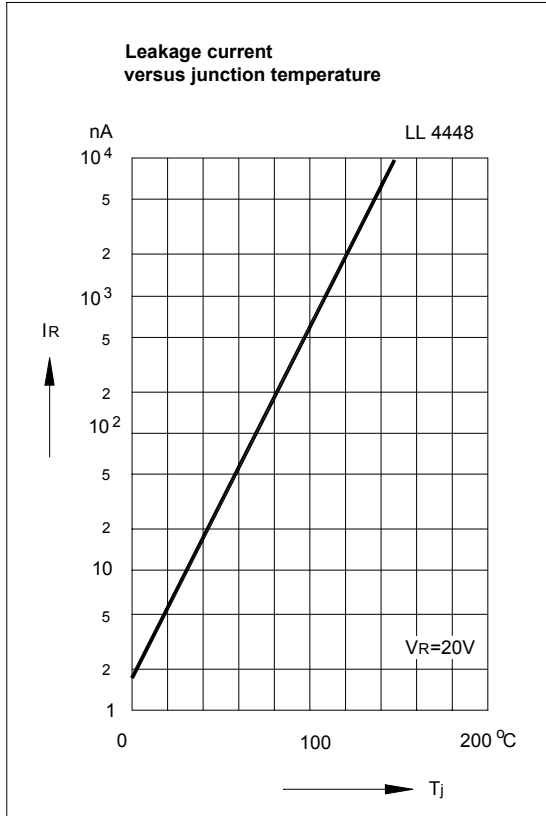


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