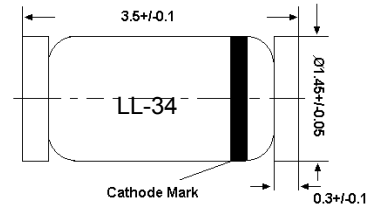


Fast switching diode in MiniMELF case especially suited for automatic surface mounting



Glass case MiniMELF
Dimensions in mm

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

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	100	V
Reverse Voltage	V_R	75	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	0.5	A
at $t = 1\text{ s}$		1	
at $t = 1\text{ ms}$		4	
at $t = 1\text{ }\mu\text{s}$			
Power Dissipation	P_{tot}	500 ¹⁾	mW
Junction Temperature	T_j	175	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 175	$^\circ\text{C}$

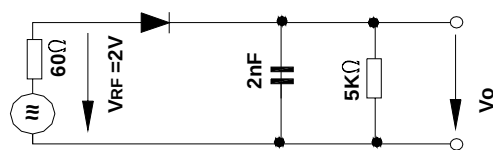
¹⁾ Valid provided that electrodes are kept at ambient temperature.

LL4148

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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$	V_F	-	1	V
Leakage Current at $V_R = 20\text{ V}$ at $V_R = 75\text{ V}$ at $V_R = 20\text{ V}$, $T_j = 150\text{ }^{\circ}\text{C}$	I_R I_R I_R	- - -	25 5 50	nA μA μA
Reverse Breakdown Voltage tested with $100\text{ }\mu\text{A}$ Pulses	$V_{(BR)R}$	100	-	V
Capacitance at $V_R = 0$, $f = 1\text{ MHz}$	C_{tot}	-	4	pF
Voltage Rise when Switching ON tested with 50 mA Forward Pulses $t_p = 0.1\text{ s}$, Rise Time $< 30\text{ ns}$, $f_p = 5\text{ to }100\text{ KHz}$	V_{fr}	-	2.5	V
Reverse Recovery Time at $I_F = 10\text{ mA}$ to $I_R = 1\text{ mA}$, $V_R = 6\text{ V}$, $R_L = 100\text{ }\Omega$	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	-	-

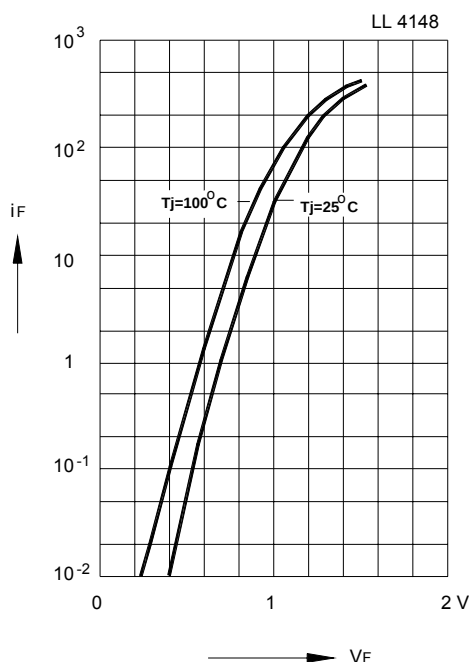
¹⁾ Valid provided that electrodes are kept at ambient temperature.



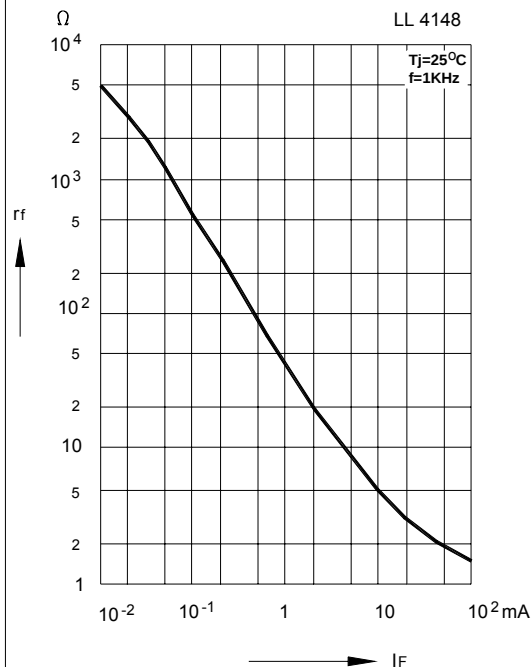
Rectification Efficiency Measurement Circuit

RATING AND CHARACTERISTIC CURVES (LL4148)

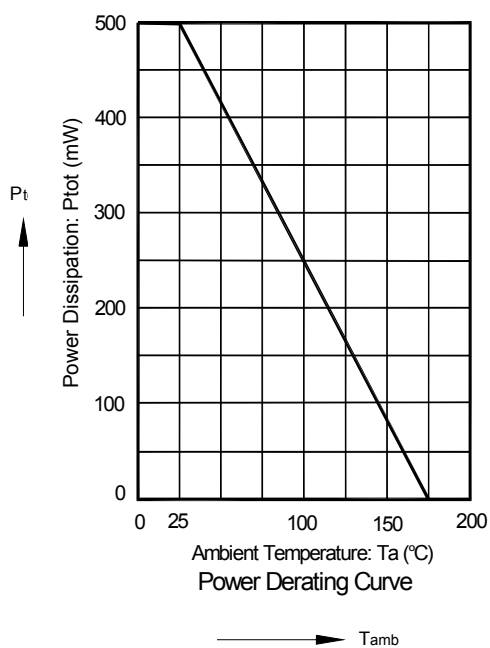
Forward characteristics



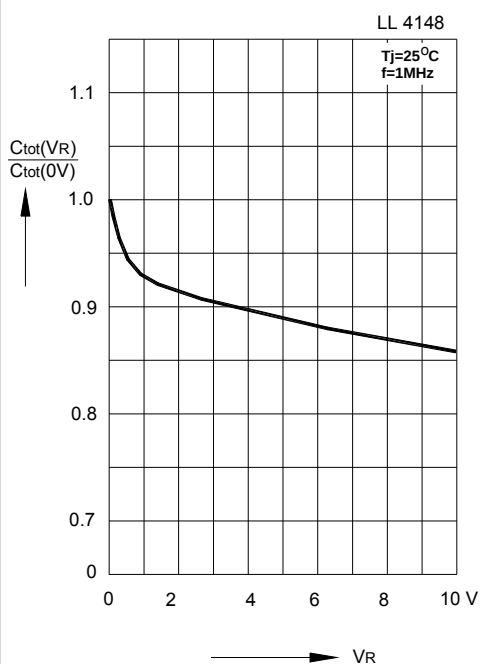
Dynamic forward resistance versus forward current



Admissible power dissipation versus ambient temperature
Valid provided that electrodes are kept at ambient temperature



Relative capacitance versus reverse voltage



RATING AND CHARACTERISTIC CURVES (LL4148)

