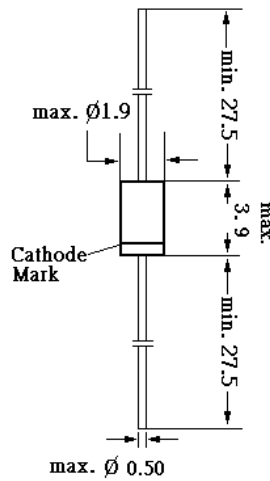


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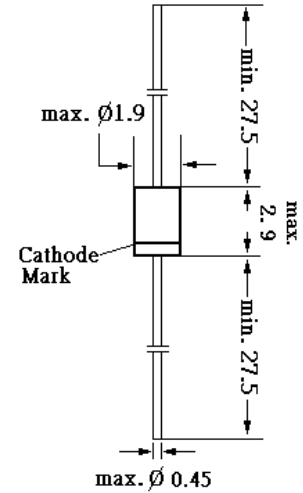
SILICON EPITAXIAL PLANAR DIODE

Fast switching diode

This diode is also available in MiniMELF case with the type designation LL4148.



Glass case JEDEC DO-35
Dimensions in mm

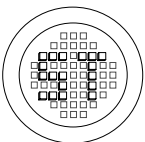


Glass case JEDEC DO-34
Dimensions in mm

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 $f \geq 50$ 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	200	$^\circ\text{C}$
Storage Temperature Range	T_s	-65 to +200	$^\circ\text{C}$

¹⁾ Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.



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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
Certificate No. 0506098

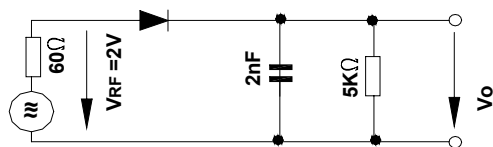
Dated : 22/07/2004

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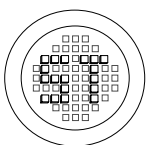
Characteristics at $T_j = 25^\circ\text{C}$

	Symbol	Min.	Typ.	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 $V_R = 20\text{V}, T_j = 150^\circ\text{C}$	I_R I_R I_R	- - -	- - -	25 5 50	nA μA μA
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$ at $I_R = 5.0 \mu\text{A}$	$V_{(BR)R}$ $V_{(BR)R}$	100 75	- -	- -	V V
Capacitance at $V_F = V_R = 0$	C_{tot}	-	-	4	pF
Voltage Rise when Switching ON tested with 50 mA Forward Pulses $t_p = 0.1 \text{ s}$, Rise Time < 30ns, $f_p = 5$ to 100 kHz	V_{fr}	-	-	2.5	V
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 $f = 100\text{MHz}$, $V_{\text{RF}} = 2\text{V}$	η_v	0.45	-	-	-

¹⁾ Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.



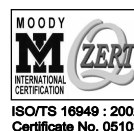
Rectification Efficiency Measurement Circuit



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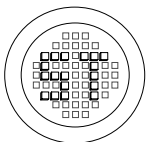
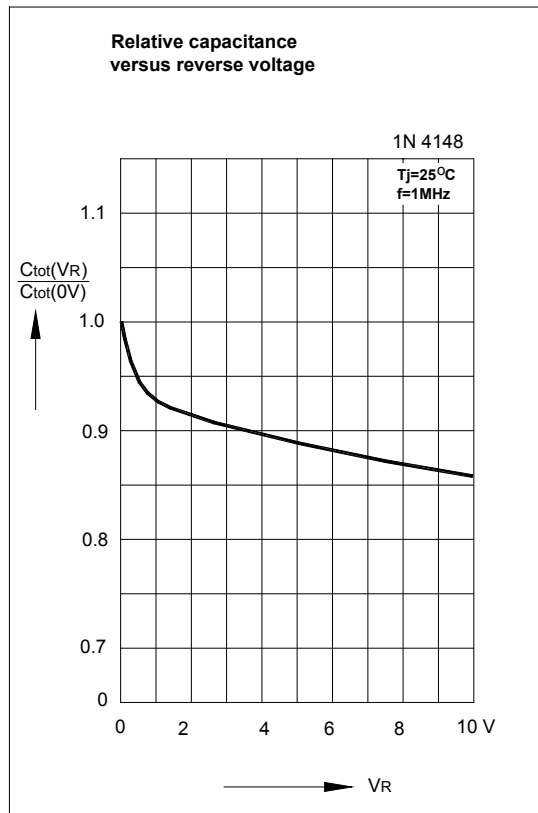
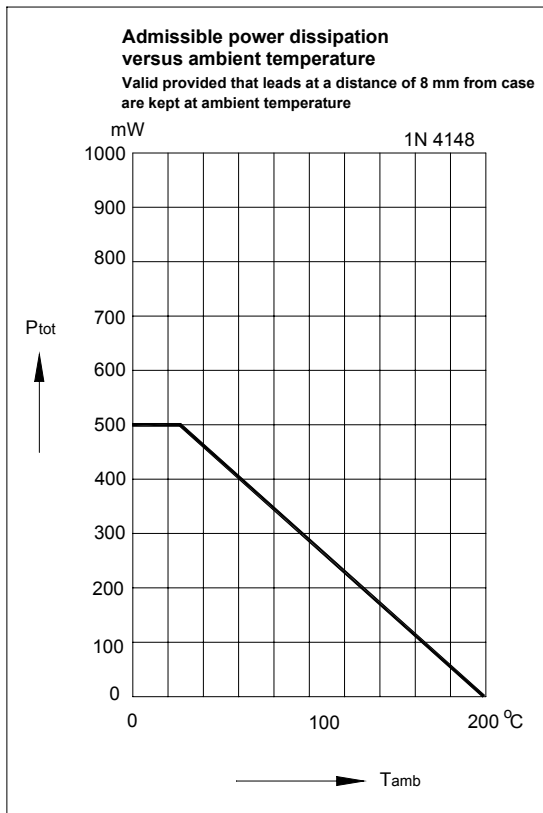
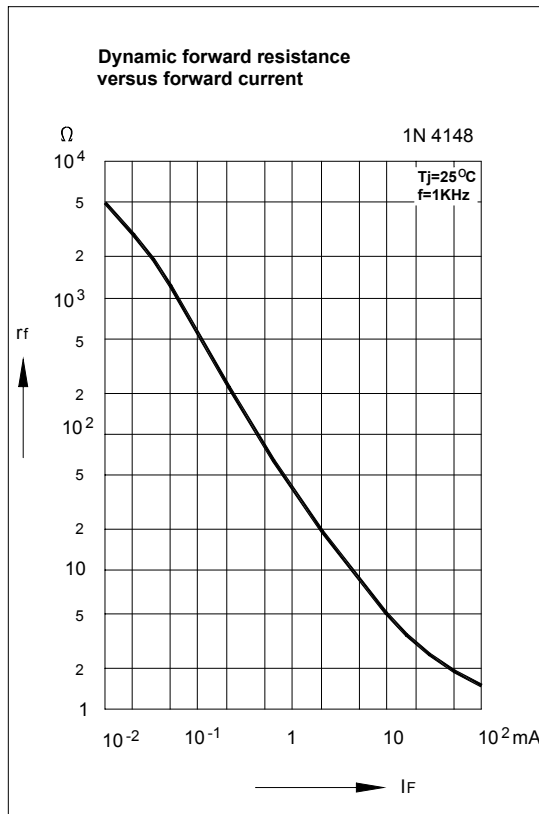
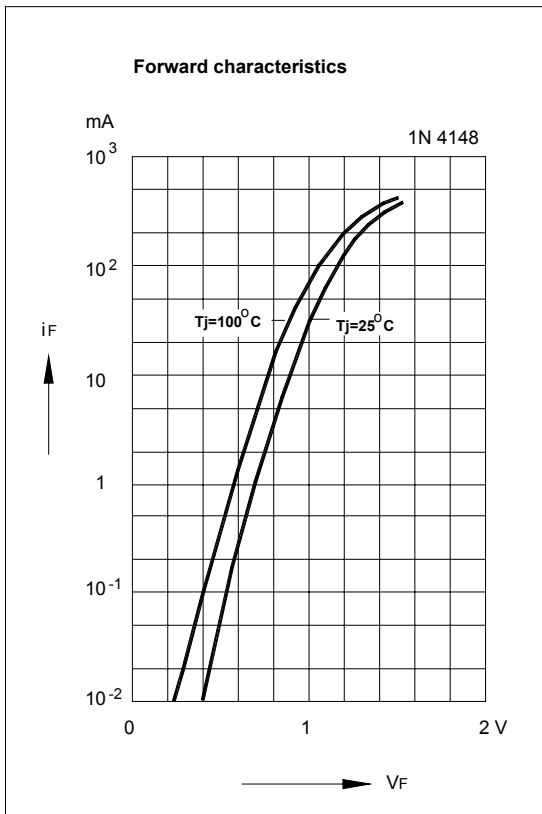
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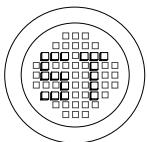
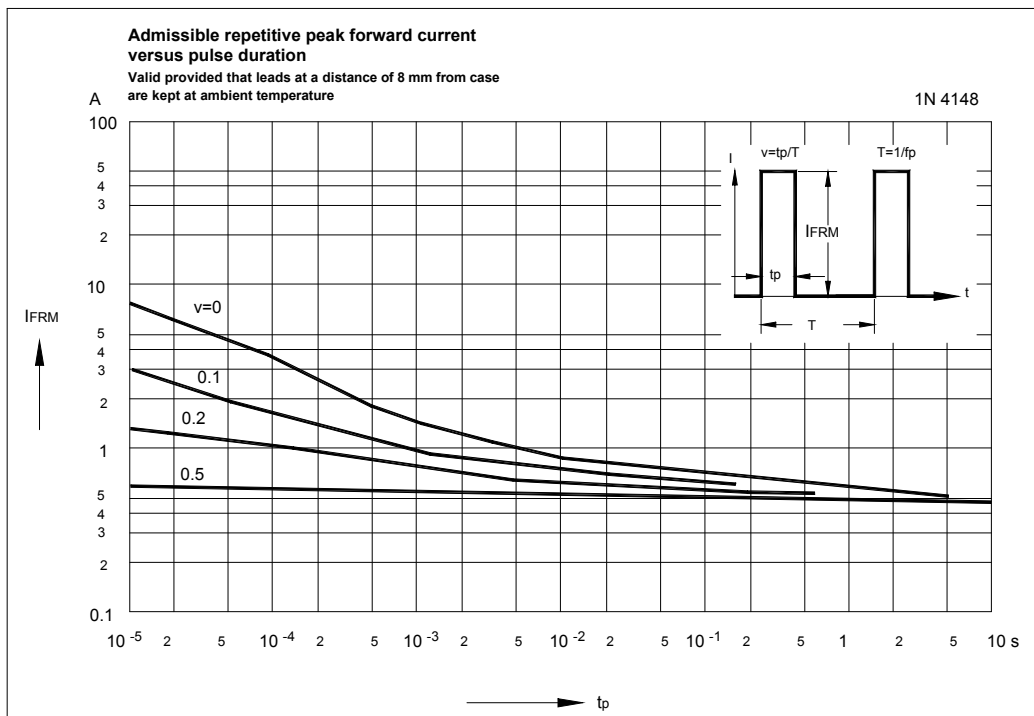
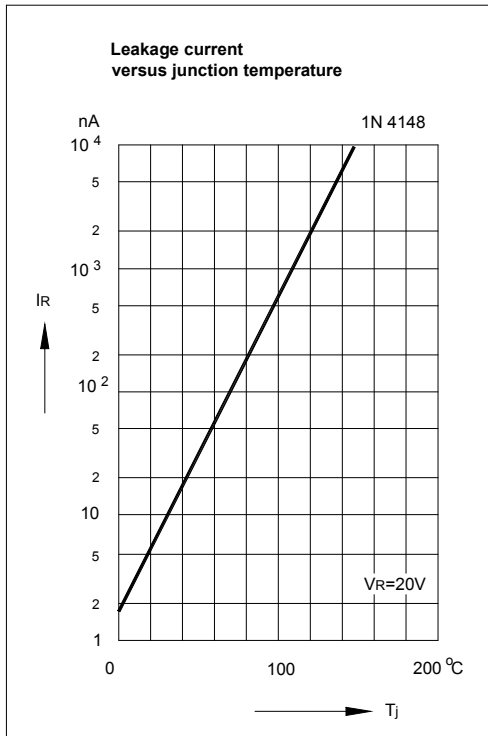


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