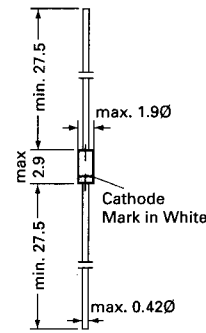


# 1N 4148M SILICON EPITAXIAL PLANAR DIODE

**Silicon Epitaxial Planar Diode**  
fast switching diode.



Glass case JEDEC DO-34

Dimensions in mm

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

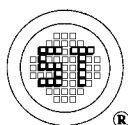
	Symbol	Value	Unit
Reverse Voltage	$V_R$	50	V
Peak Reverse Voltage	$V_{RM}$	60	V
Rectified Current (Average) Half Wave Rectification with Resist. Load at $T_{amb} = 25\text{ }^\circ\text{C}$ and $f \geq 50\text{ Hz}$	$I_0$	130 <sup>1)</sup>	mA
Surge Forward Current at $t < 1\text{ s}$ and $T_j = 25\text{ }^\circ\text{C}$	$I_{FSM}$	500	mA
Power Dissipation at $T_{amb} = 25\text{ }^\circ\text{C}$	$P_{tot}$	400 <sup>1)</sup>	mW
Junction Temperature	$T_j$	200	$^\circ\text{C}$
Storage Temperature Range	$T_s$	-65 to + 200	$^\circ\text{C}$

<sup>1)</sup> Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature

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

	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at $I_F = 100\text{ mA}$	$V_F$	-	-	1.1	V
Leakage Current at $V_R = 50\text{ V}$	$I_R$	-	-	0.5	$\mu\text{A}$
Reverse Breakdown Voltage tested with 100 $\mu\text{A}$ Pulses	$V_{(BR)R}$	60	-	-	V
Capacitance at $V_F = V_R = 0$	$C_{tot}$	-	-	3	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

<sup>1)</sup> Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature

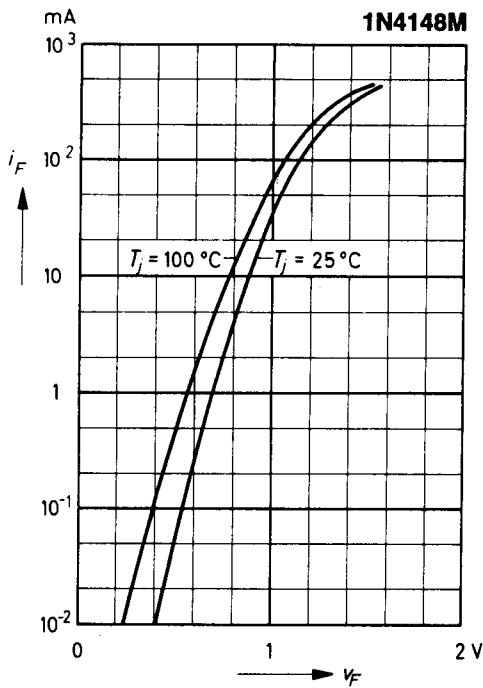


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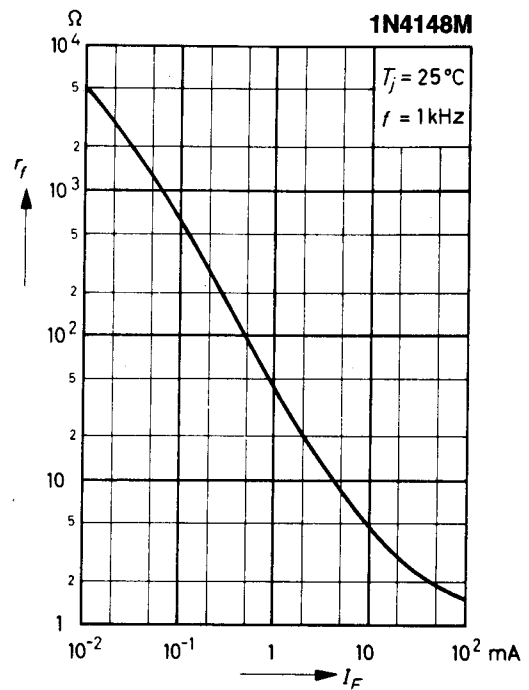


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**Forward characteristics**

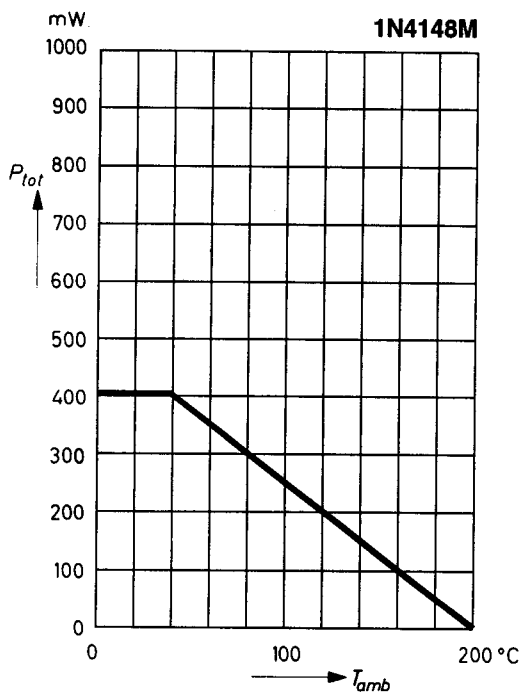


**Dynamic forward resistance versus forward current**

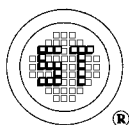
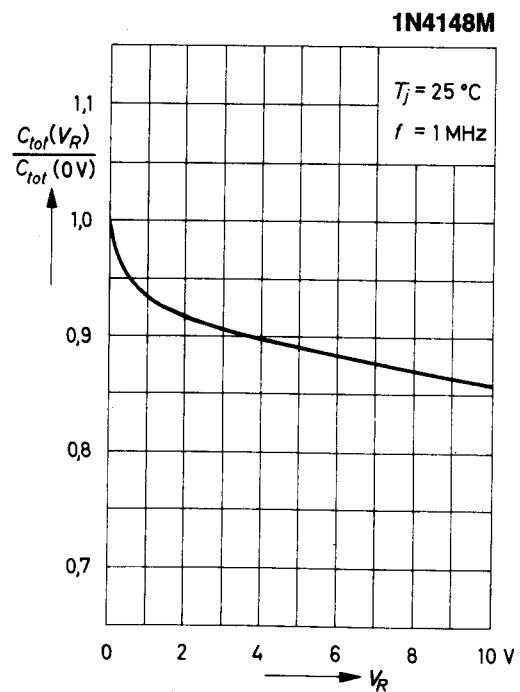


**Admissible power dissipation versus ambient temperature**

Valid provided that electrodes are kept at ambient temperature



**Relative capacitance versus reverse voltage**



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