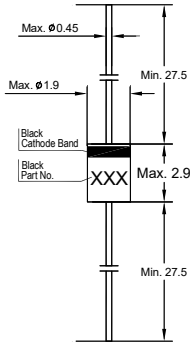
1N4148M

Silicon Epitaxial Planar Switching Diode



Glass Case DO-34
Dimensions in mm

Applications

• High-speed switching

Absolute Maximum Ratings (T_a = 25℃)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	60	V
Reverse Voltage	V_R	50	V
Average Rectified Forward Current	$I_{F(AV)}$	130	mA
Surge Forward Current at t < 1 s	I_{FSM}	500	mA
Power Dissipation	P_{tot}	400	mW
Junction Temperature	T_j	200	℃
Storage Temperature Range	T_{stg}	- 65 to + 200	℃

Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air [1)]	$R_{\theta JA}$	438	℃/W

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

Characteristics at T_a = 25℃

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 100 µA	$V_{(BR)R}$	60	-	V
Forward Voltage at I_F = 100 mA	V_F	-	1.1	V
Reverse Leakage Current at V_R = 50 V	I_R	-	0.5	µA
Capacitance at V_R = 0, f = 1 MHz	C_{tot}	-	3	pF
Reverse Recovery Time at I_F = 10 mA, I_{rr} = 0.1 x I_R, V_R = 6 V, R_L = 100 Ω	t_{rr}	-	4	ns

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Electrical Characteristics Curves

Fig 1. Power Derating Curve

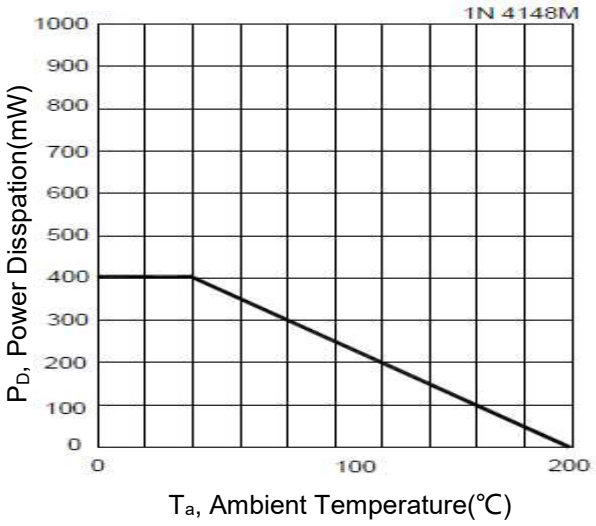


Fig 2. Capacitance Characteristics

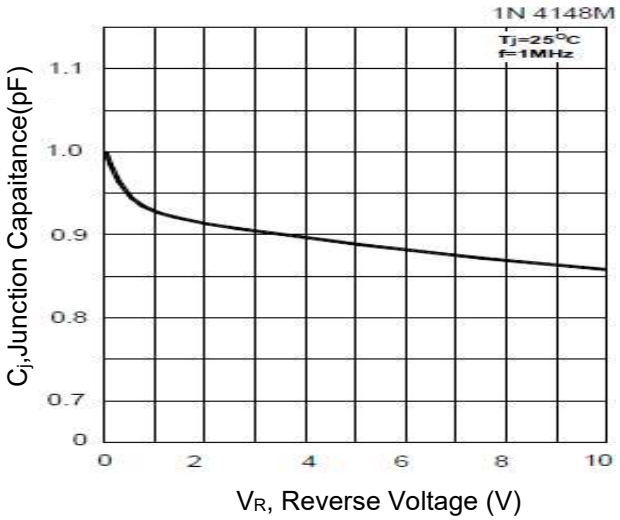
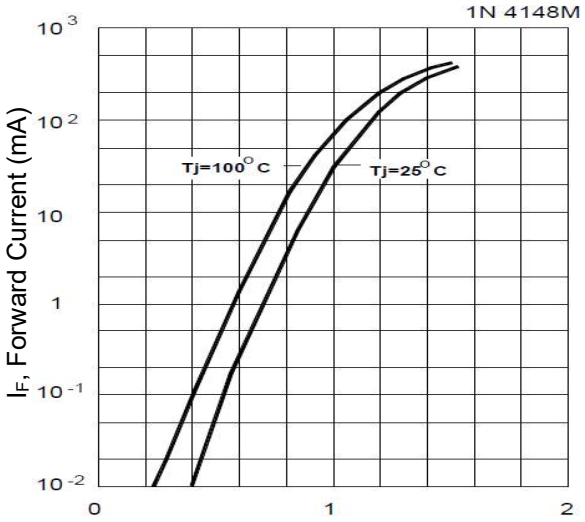


Fig 3. Forward Characteristics



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