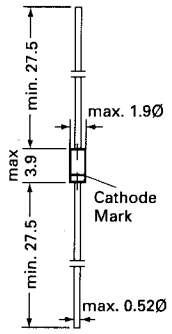
1N 4448
SILICON EPITAXIAL PLANAR DIODE

Silicon Expitaxial Planar Diode
fast switching diode.

This diode is also available in MiniMELF case with type desigantion LL4448.



Glass case JEDEC DO-35

Dimensions in mm

Absolute Maximum Ratings (T_a = 25 °C)

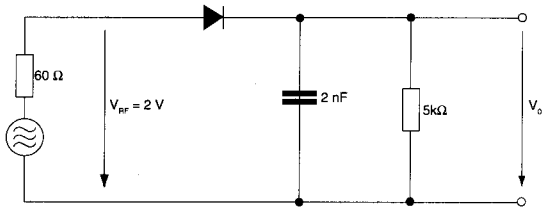
	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Rectified Current (Average) Half Wave Rectification with Resist. Load at T_{amb} = 25 °C and f ≥ 50 Hz	I_0	150 [1]	mA
Surge Forward Current at t < 1 s and T_j = 25 °C	I_{FSM}	500	mA
Power Dissipation at T_{amb} = 25 °C	P_{tot}	500 [1]	mW
Junction Temperature	T_j	200	°C
Storage Temperature Range	T_S	-65 to + 200	°C
[1] Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature			

1N 4448
SILICON EPITAXIAL PLANAR DIODE

Characteristics at T_j = 25 °C

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

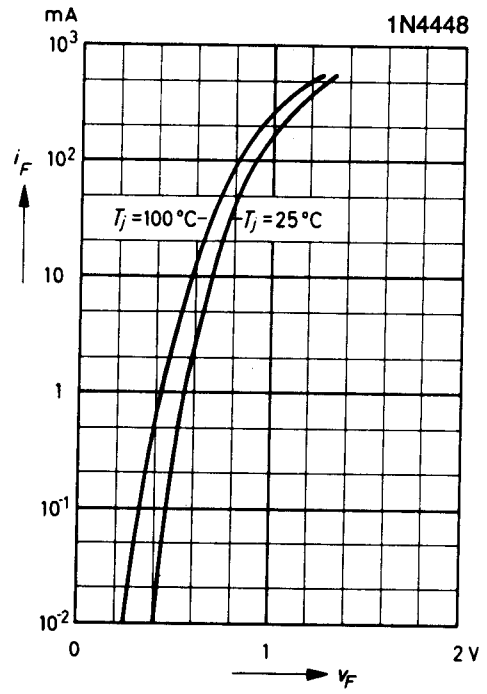
[1)] Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature



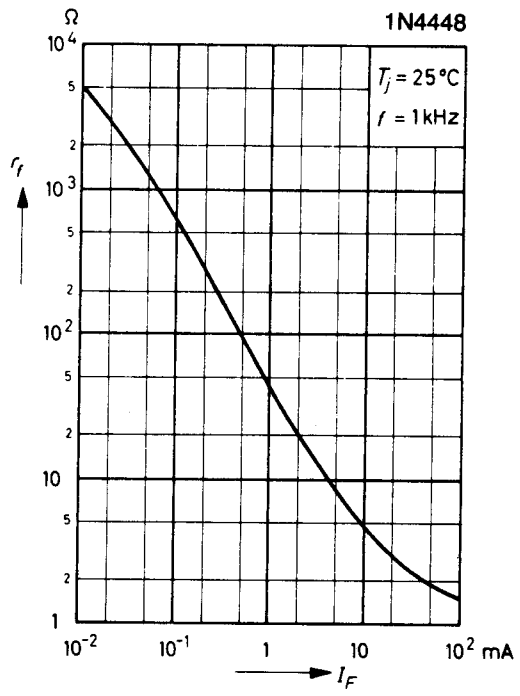
Rectification Efficiency Measurement Circuit

1N 4448
SILICON EPITAXIAL PLANAR DIODE

Forward characteristics

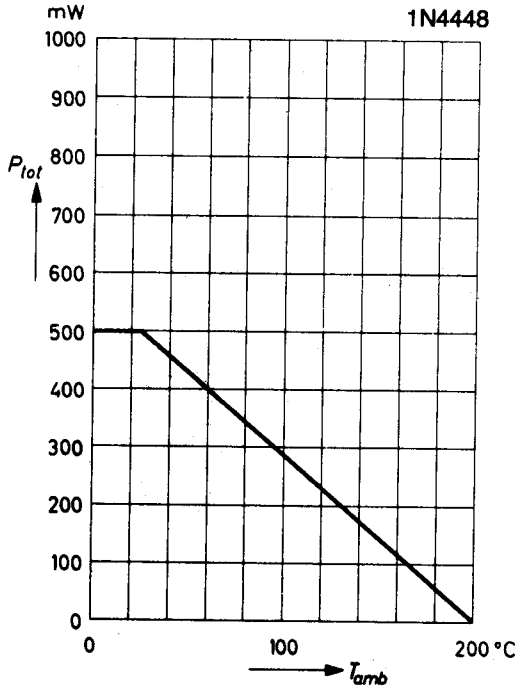


Dynamic forward resistance versus forward current

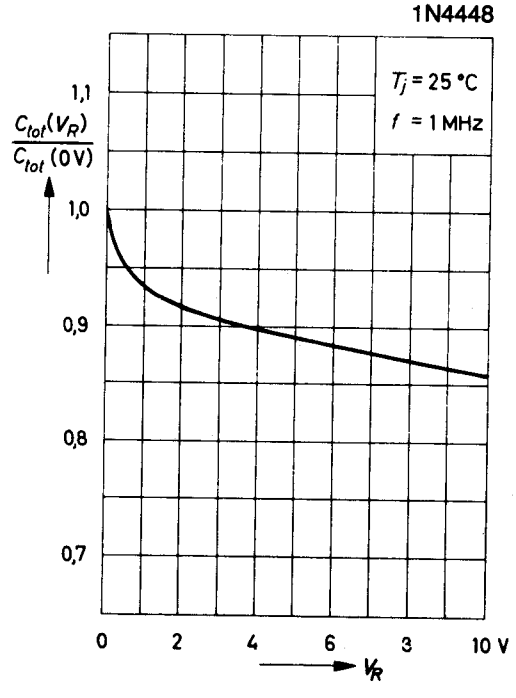


Admissible power dissipation versus ambient temperature

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

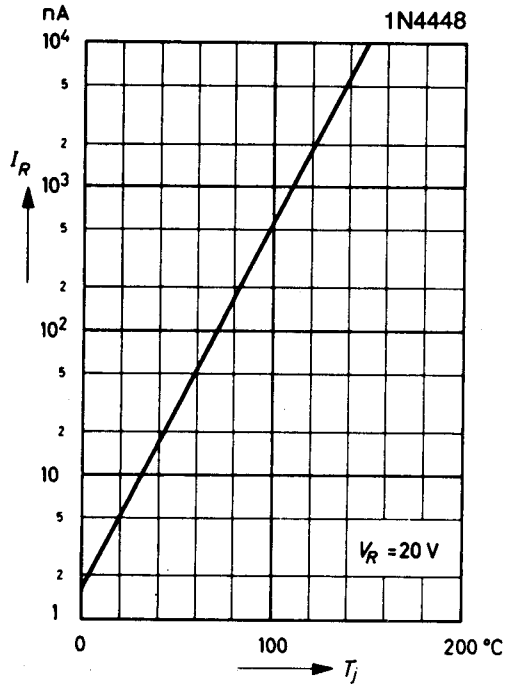


Relative capacitance versus reverse voltage



1N 4448
SILICON EPITAXIAL PLANAR DIODE

Leakage current versus junction temperature



Admissible repetitive peak forward current versus pulse duration

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