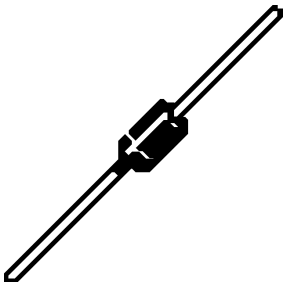
Data Sheet

500 mW EPITAXIAL PLANAR DIODES

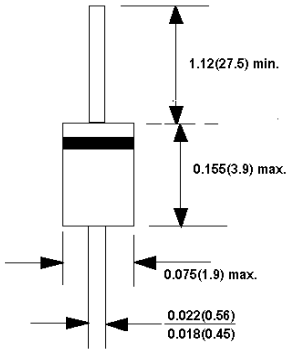
1N4148/1N4448

Description



DO-35 (Glass)

Mechanical Dimensions



Dimensions in inches(mm)

Features

- Silicon Epitaxial Planar Diode
- 500mW Power Dissipation
- Pb Free product are Available
- Bulk--2K, 13" T/R--10K, T/B--5K Ammo Box

Mechanical Data

- Case: DO-35 Glass
- Terminals: Solderable per MIL-STD-202E Method 208
- Polarity: Cathode Band
- Weight: 0.13grams

Max Ratings at Tj=25C Unless Otherwise Specified

Characteristic	Syb	1N4148/1N4448	Unit
Reverse Voltage	Vr	75	V
Peak Reverse Voltage	VRM	100	V
Average Rectified Current	$I_{F(AV)}$	150	mA
Surge Forward Current at t<1s	I_{FSM}	500	mA
Power Dissipation Derate above at 25C	Pd	500	mW
Storage Temp. Range	Ts	-55~+200	C
Junction Temp. Range	Tj	200	C
Max Forward Voltage @ If=10mA ---1N4148 If=100mA--1N4448	VF	1.0 max	V
Reverse Voltage Leakage Current Vr=20V Vr=75V Vr=25V at Tj=150C	Ir	25 5 50	uA
Reerse Breakdown Voltage tested width 100uA	Vbr	100 min.	V
Voltage rise when switching on tseted with 50mA pulses tp=0.1us, rise time<30ns, fp=5~100kHz	Vfr	2.5 max.	V
Recerse Recovery Time	trr	4 max.	nS
Capacitance at VF=VR=0	Ctot	4	pF
Max Thermal Resistance Junction to Ambient Air	Rthja	350	k/W

* lead lept at ambient temp. at 8mm length

Semiconductor *Data Sheet*

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Typical Characteristics (T_{amb} = 25 °C unless otherwise specified)

Figure 1. Forward Characteristics

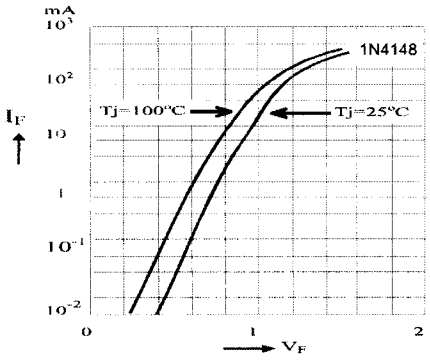

Figure 2. Forward Characteristics

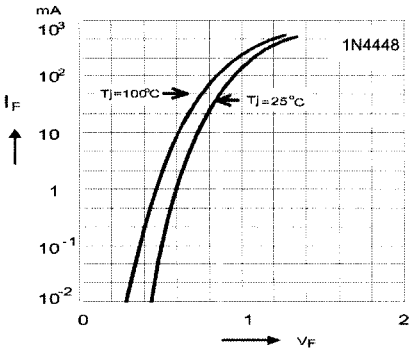

Figure 3. Admissible Power Dissipation vs. Ambient Temperature

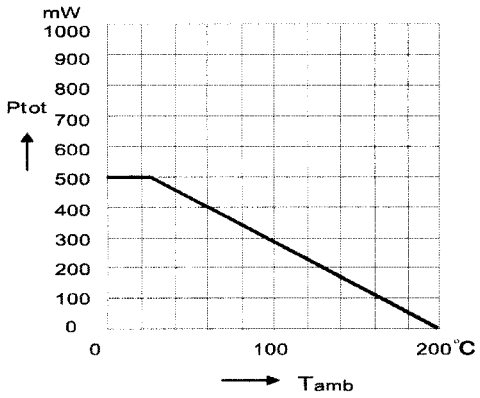

Figure 4. Dynamic Forward Resistance vs. Forward Current

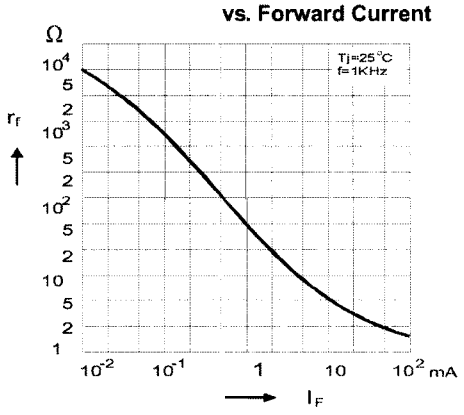

Figure 5. Relative Capacitance vs. Reverse Voltage