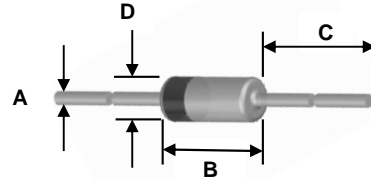


Small Signal Diode

**DO-35 Axial Lead
HERMETICALLY SEALED GLASS**

Features

- ✧ Fast switching device ($T_{rr} < 4.0\text{ns}$)
- ✧ Through-hole device type mounting
- ✧ Moisture sensitivity level 1
- ✧ Solder hot dip Tin (Sn) lead finish
- ✧ Pb free version and RoHS compliant
- ✧ All External Surfaces are Corrosion Resistant and Leads are Readily Solderable

Mechanical Data

- ✧ Case : DO-35 package (SOD-27)
- ✧ High temperature soldering guaranteed : $260^{\circ}\text{C}/10\text{s}$
- ✧ Polarity : Indicated by cathode band
- ✧ Weight : $109 \pm 4\text{ mg}$

Dimensions	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	0.45	0.55	0.018	0.022
B	3.05	5.08	0.120	0.200
C	25.4	38.1	1.000	1.500
D	1.53	2.28	0.060	0.090

Ordering Information

Part No.	Package	Packing
1Nxxxx A0	DO-35	5Kpcs / Ammo
1Nxxxx R0	DO-35	10Kpcs / 14" Reel

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Type Number	Symbol	Value	Units
Power Dissipation	P_D	500	mW
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Non-Repetitive Peak Forward Surge Current Pulse Width 8.3ms	I_{FSM}	2.0	A
Non-Repetitive Peak Forward Current	I_{FM}	450	mA
Mean Forward Current	I_O	150	mA
Thermal Resistance (Junction to Ambient) (Note 1)	$R_{\theta JA}$	240	$^{\circ}\text{C}/\text{W}$
Junction and Storage Temperature Range	T_J, T_{STG}	-65 to + 150	$^{\circ}\text{C}$

Electrical Characteristics

Type Number	Symbol	Min	Max	Units
Reverse Breakdown Voltage $I_R=100\mu\text{A}$ $I_R=5\mu\text{A}$	$V_{(BR)}$	100 75		V
Forward Voltage 1N4448, 1N914B 1N4148 1N4448, 1N914B	V_F	0.62	0.72 1.0 1.0	V
Reverse Leakage Current $V_R=20\text{V}$ $V_R=75\text{V}$	I_R		25 5.0	nA μA
Junction Capacitance $V_R=0, f=1.0\text{MHz}$	C_J		4.0	pF
Reverse Recovery Time (Note 2)	T_{rr}		4.0	ns

Notes:1. Valid provided that electrodes are kept at ambient temperature

Notes:2. Reverse Recovery Test Conditions: $I_F=10\text{mA}$, $I_R=60\text{mA}$, $R_L=100\Omega$, $I_{RR}=1\text{mA}$

Small Signal Diode

Rating and Sharacteristic Curves

FIG 1 Typical Forward Characteristics

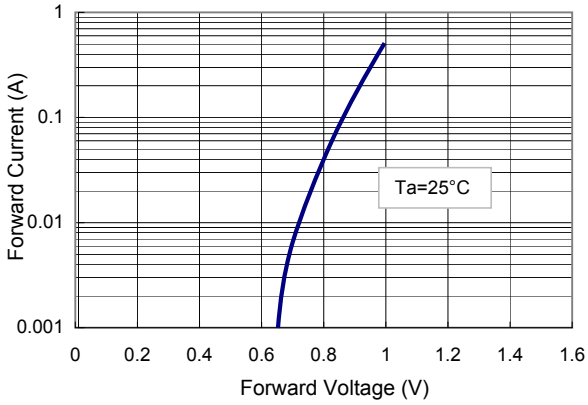


FIG 2 Reverse Current vs Reverse Voltage

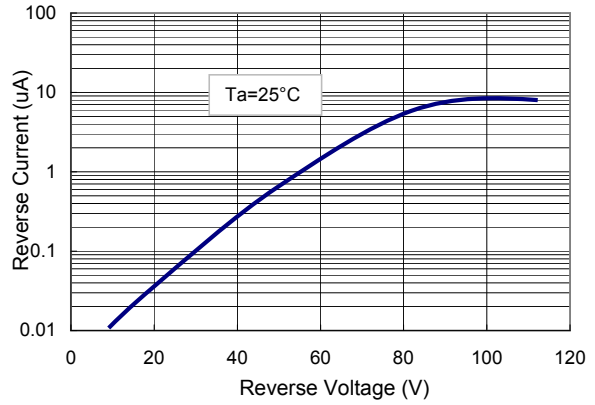


FIG 3 Admissible Power Dissipation Curve

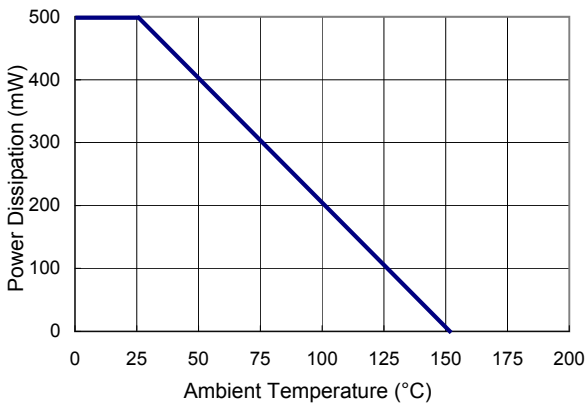


FIG 4 Typical Junction Capacitance

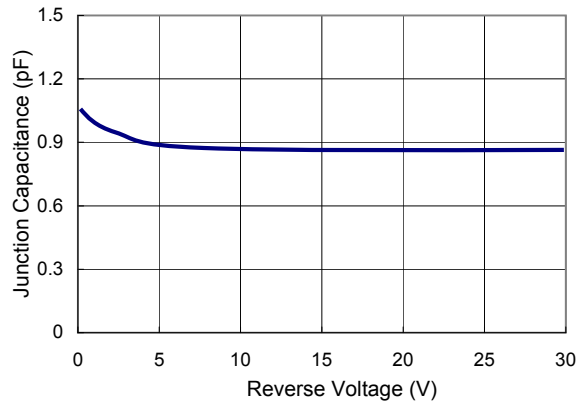


FIG 5 Forward Resistance vs. Forward Current

