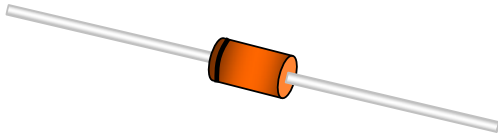


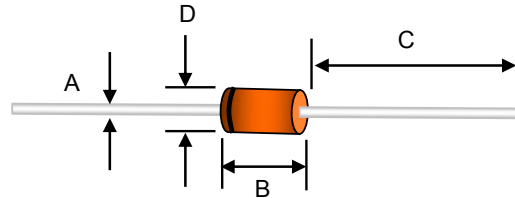
Small Signal Diode



DO-35 Axial Lead
HERMETICALLY SEALED GLASS

Features

- ↯ Fast switching device ($T_{rr} < 4.0nS$)
- ↯ 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°C/10s
- ↯ Polarity : Indicated by cathode band
- ↯ Weight : 109 ± 4 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	0.201
C	25.40	38.10	1.000	1.500
D	1.53	2.28	0.060	0.090

Ordering Information

Package	Part No.	Packing
DO-35	1N4148 A0	5K / Ammo
DO-35	1N4448 A0	5K / Ammo
DO-35	1N914B A0	5K / Ammo
DO-35	1N4148 R0	10K / 14" Reel
DO-35	1N4448 R0	10K / 14" Reel
DO-35	1N914B R0	10K / 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
Peak Forward Surge Current Pulse Width = 1uS, Square Wave	I_{FSM}	2.0	A
Non-Repetitive Peak Forward Current	I_{FM}	450	mA
Average Forward Current	I_o	150	mA
Thermal Resistance (Junction to Ambient)	$R\theta_{JA}$	240	°C/W
Junction and Storage Temperature Range	T_J, T_{STG}	-65 to + 150	°C

Small Signal Diode

Maximum Ratings and Electrical Characteristics

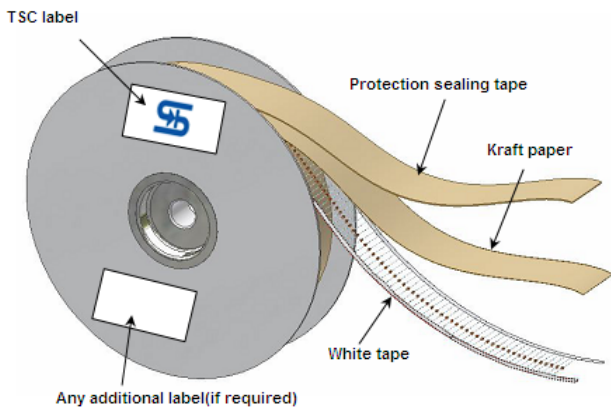
Rating at 25°C ambient temperature unless otherwise specified.

Electrical Characteristics

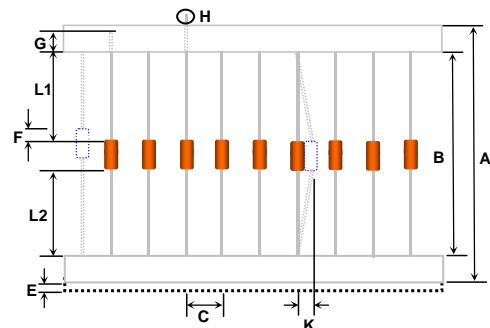
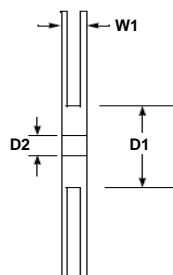
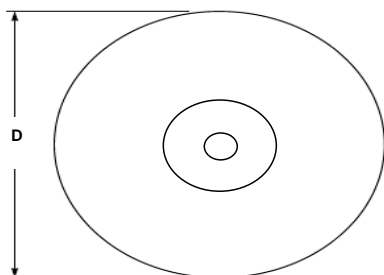
Type Number		Symbol	Min	Max	Units
Reverse Breakdown Voltage	$I_R=100\mu A$	$V_{(BR)}$	100		V
	$I_R=5\mu A$		75		
Forward Voltage	1N4448, 1N914B	V_F	0.62	0.72	V
	1N4148			1.0	
	1N4448, 1N914B			1.0	
Reverse Leakage Current	$V_R=20V$	I_R		25	nA
	$V_R=75V$			5.0	μA
Junction Capacitance	$V_R=0, f=1.0MHz$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

Notes: 1. Test Conditions: $I_F=10mA, V_R=6V, R_L=100\Omega, I_{RR}=1mA$

Tape & Reel specification



Item	Symbol	Dimension(mm)
Overall width	A	64+1.69/-0.69
Tape spacing	B	52.0+/-0.69
Component Pitch	C	5.08+/-0.40
Untaped lead	L1-L2	+/-0.69
Bent	K	1.2 Max
Tape Mismatch	E	0.55(MAX)
Glass offset	F	0.69(MAX)
Taped lead	G	3.2Min
lead beyond tape	H	0
Reel outside diameter	D	260+/-3
Reel inner diameter	D1	48+/-1
Feed hole width	D2	20+/-0.5
Reel width	W1	72+3/-1



Small Signal Diode

Rating and Characteristic Curves

FIG 1 Typical Forward Characteristics

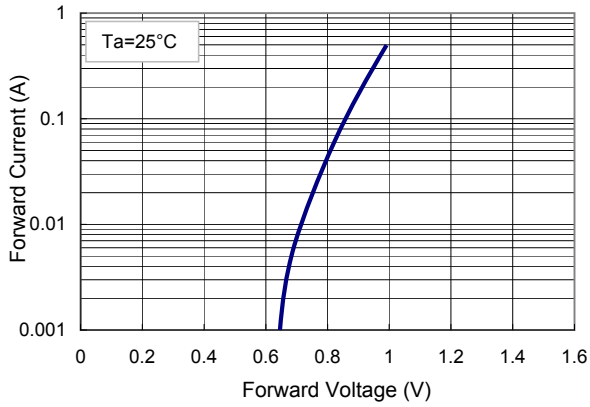


FIG 2 Reverse Current vs Reverse Voltage

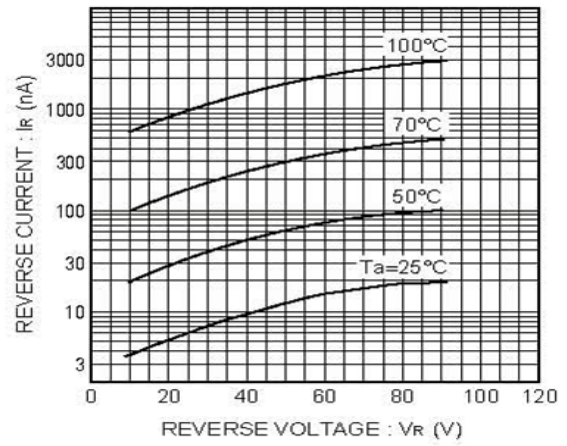


FIG 3 Admissible Power Dissipation Curve

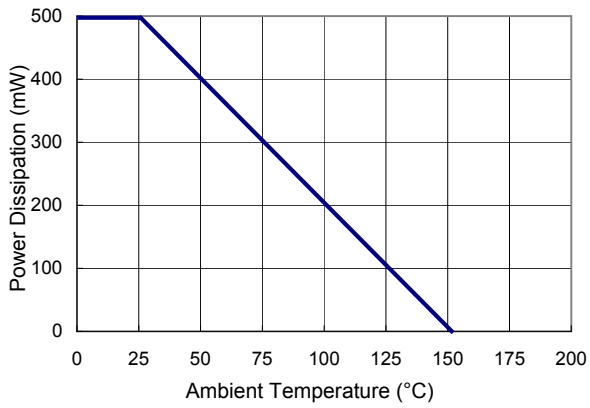


FIG 4 Typical Junction Capacitance

