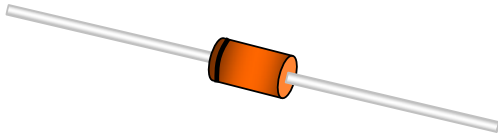
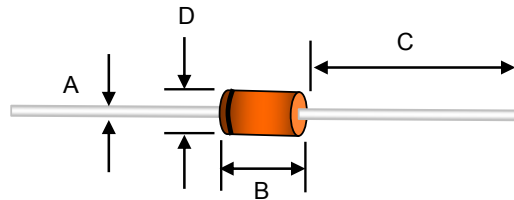


## Small Signal Diode



### 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°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 A0G	5K / Ammo
DO-35	1N4448 A0G	5K / Ammo
DO-35	1N914B A0G	5K / Ammo
DO-35	1N4148 R0G	10K / 14" Reel
DO-35	1N4448 R0G	10K / 14" Reel
DO-35	1N914B R0G	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**

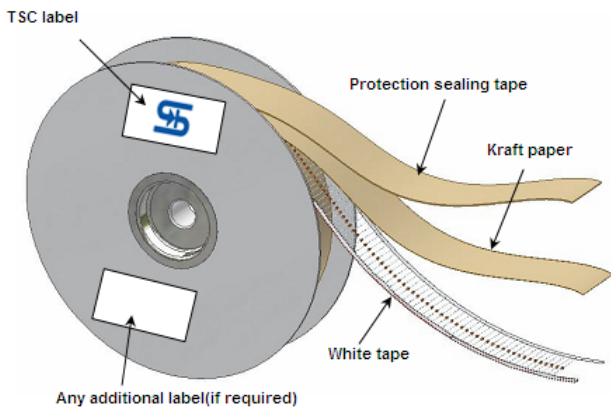
Rating at 25°C ambient temperature unless otherwise specified.

**Electrical Characteristics**

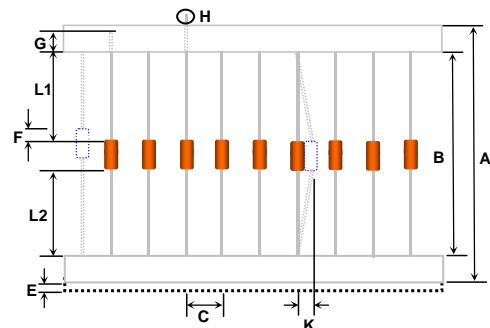
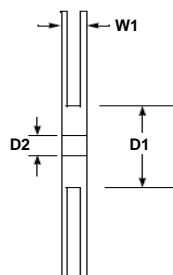
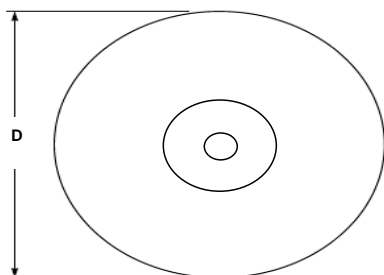
Type Number		Symbol	Min	Max	Units
Reverse Breakdown Voltage	$I_R=100\mu A$	$V_{(BR)}$	100		V
	$I_R=5\mu A$		75		
Forward Voltage	1N4448, 1N914B	$V_F$	0.62	0.72	V
	1N4148			1.0	
	1N4448, 1N914B			1.0	
Reverse Leakage Current	$V_R=20V$	$I_R$		25	nA
	$V_R=75V$			5.0	$\mu A$
Junction Capacitance	$V_R=0,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



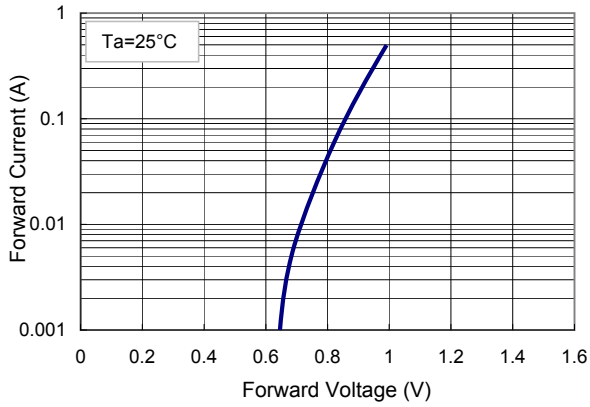
Item	Symbol	Dimension(mm)
Overall width	A	64+1.69/-0.69
Tape spacing	B	52.0+/-0.69
Component Pitch	C	5.08+/-0.40
Untaped lead	L1-L2	+/-0.69
Bent	K	1.2 Max
Tape Mismatch	E	0.55(MAX)
Glass offset	F	0.69(MAX)
Taped lead	G	3.2Min
lead beyond tape	H	0
Reel outside diameter	D	260+/-3
Reel inner diameter	D1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



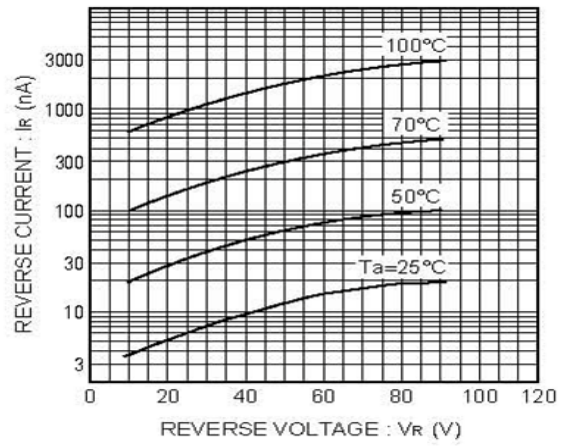
**Small Signal Diode**

**Rating and Characteristic Curves**

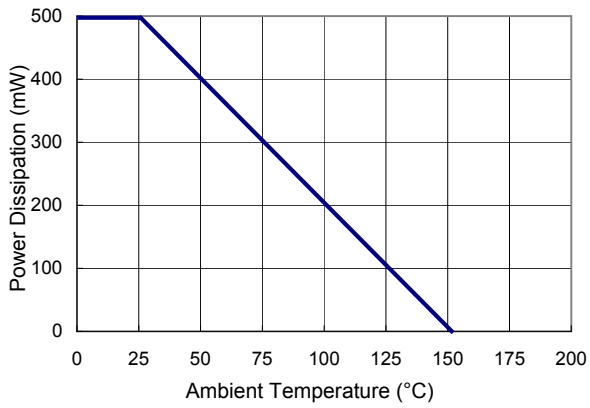
**FIG 1 Typical Forward Characteristics**



**FIG 2 Reverse Current vs Reverse Voltage**



**FIG 3 Admissible Power Dissipation Curve**



**FIG 4 Typical Junction Capacitance**

