

1N4148

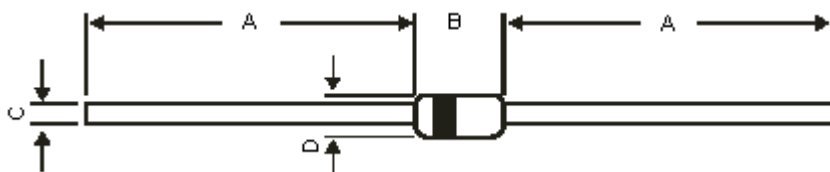
Small Signal Diode



Features:

- High speed silicon switching diodes, axial leaded.
- General purpose, industrial, military and space applications.
- Hermetically sealed glass with a stud on either side of the glass passivated chip provides excellent stability.
- Extremely low leakage and very high reliability.

DO-35 Glass Axial Package



NOTE

1. Cathode is marked by Band.

Dimensions	Minimum	Maximum
A	25.40	-
B	3.03	4.44
C	0.46	0.56
D	1.52	2.29

Dimensions : Millimetres

Absolute Maximum Ratings ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Reverse Voltage (Continuous)	V_R	75	
Average Forward Current	$I_{F(AV)}$	150	mA
Forward Current (DC)	I_F	200	
Repetitive Peak Forward Current	I_{FRM}	450	
Non Repetitive Peak Surge Current $t_p = 1\mu$ second $t_p = 1$ second	I_{FSM}	2000 500	
Power Dissipation Derating Factor	P_{TA}	500 2.85	mW mW/ $^\circ\text{C}$
Operating and Storage Junction Temperature Range	T_j, T_{stg}	-65 to +200	$^\circ\text{C}$



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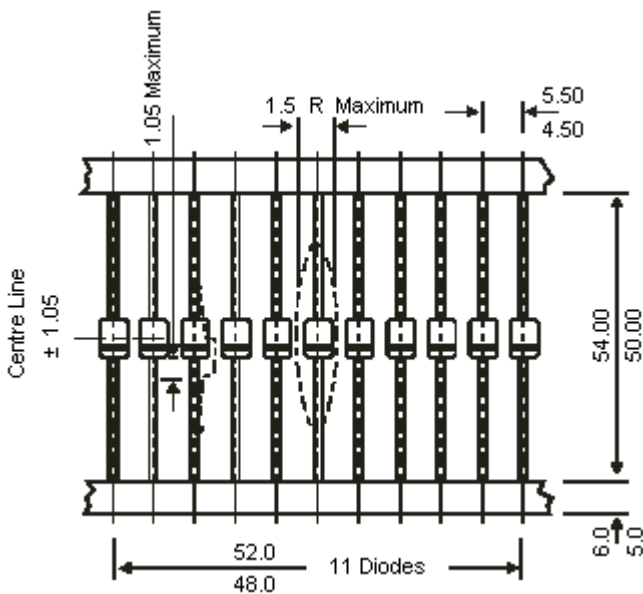
Small Signal Diode



Electrical Characteristics ($T_a = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Minimum	Maximum	Unit
Forward Voltage	V_F	$I_F = 10\text{mA}$	-	1.0	V
Reverse Current	I_R	$V_R = 20\text{V}$	-	25	nA
		$V_R = 75\text{V}$	-	5.0	μA
		$V_R = 20\text{V}, T_j = 150^\circ\text{C}$ $V_R = 75\text{V}, T_j = 150^\circ\text{C}$	-	50 100	μA μA
Reverse Breakdown Voltage	V_{BR}	$I_R = 100\mu\text{A}$ $I_R = 5\mu\text{A}$	100 75	-	V
Dynamic Characteristics					
Diode Capacitance	C_d	$V_R = 0, f = 1\text{MHz}$	-	4.0	pF
Forward Recovery Voltage	V_{fr}	$I_F = 50\text{mA}, t_r = 20\text{ns}$	-	2.5	V
Reverse Recovery Time	t_{rr}	$I_F = 10\text{mA}, \text{to } I_R = 60\text{mA}$ $R_L = 100\Omega$ Measured at $I_R = 1\text{mA}$	-	4.0	ns

DO-35, 52mm Taping Specification

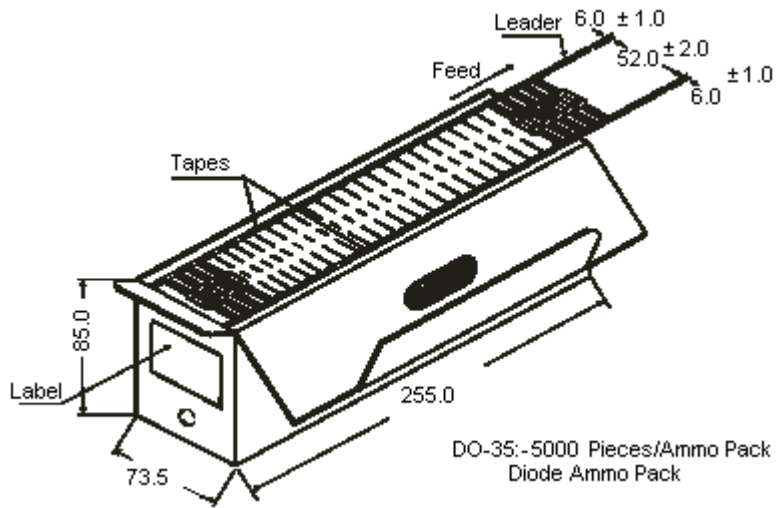


52mm Taping Specification

1. T and A indicates axial tape and ammo packing (52mm tape spacing).
2. 300mm (minimum) leader tape on every spool.
3. Number of empty places allowed 0.25% without consecutive empty places.
4. Ends of leads shall preferably not protrude beyond the tapes.
5. Components shall be held sufficiently in the tape or tapes so that they can not come free in normal handling.

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Dimensions : Millimetres

Specifications

V_{rrm} (V)	$I_{f(av)}$ (mA)	V_f (V) at $I_f = 10mA$	Length	Diameter	Package	Part Number
100	150	1	4.25	1.85	DO-35	1N4148

Order Multiple = 10

Dimensions : Millimetres



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Small Signal Diode

Notes:

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