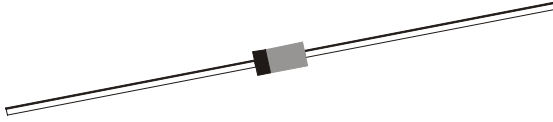


HIGH SPEED SILICON SWITCHING DIODE

1N4148, 1N4448

**DO- 35
Glass Axial Package**



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 & very high reliability

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

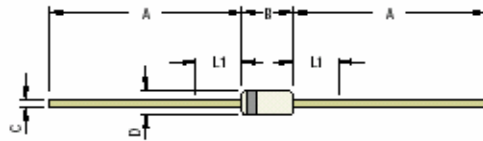
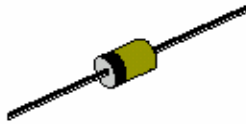
DESCRIPTION	SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Continuous Reverse Voltage	V _R	75	V
Average Forward Current	I _{F(AV)}	150	mA
Forward Current (DC)	I _F	200	mA
Repetitive Peak Forward Current	I _{FRM}	450	mA
Non Repetitive Peak Surge Current			
tp= 1μs	I _{FSM}	2000	mA
tp= 1sec	I _{FSM}	500	mA
Power Dissipation	P _{TA}	500	mW
Derating Factor		2.85	mW/ °C
Operating and Storage Junction Temperature Range	T _j , T _{stg}	- 65 to +200	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Forward Voltage	V _F	I _F =5mA 1N4448	0.62	0.72	V
		I _F =10mA 1N4148		1.0	V
		I _F =100mA 1N4448		1.0	V
Reverse Current	I _R	V _R =20V		25	nA
		V _R =75V		5.0	μA
		V _R =20V, T _j =150°C		50	μA
		V _R =75V, T _j =150°C		100	μA
Reverse Breakdown Voltage	V _{BR}	I _R =100μA	100		V
		I _R =5μA	75		V
DYNAMIC CHARACTERISTICS					
Diode Capacitance	C _d	V _R =0V, f=1MHz		4.0	pF
Forward Recovery Voltage	V _{fr}	When Switched from I _F =50mA, t _r =20ns		2.5	V
Reverse Recovery Time	t _{rr}	I _F =10mA, to I _R =60mA, R _L =100 Ω Measured at I _R =1mA		4.0	ns

DO-35
Glass Axial Package

DO-35
Hermetically Sealed
Glass Axial Package

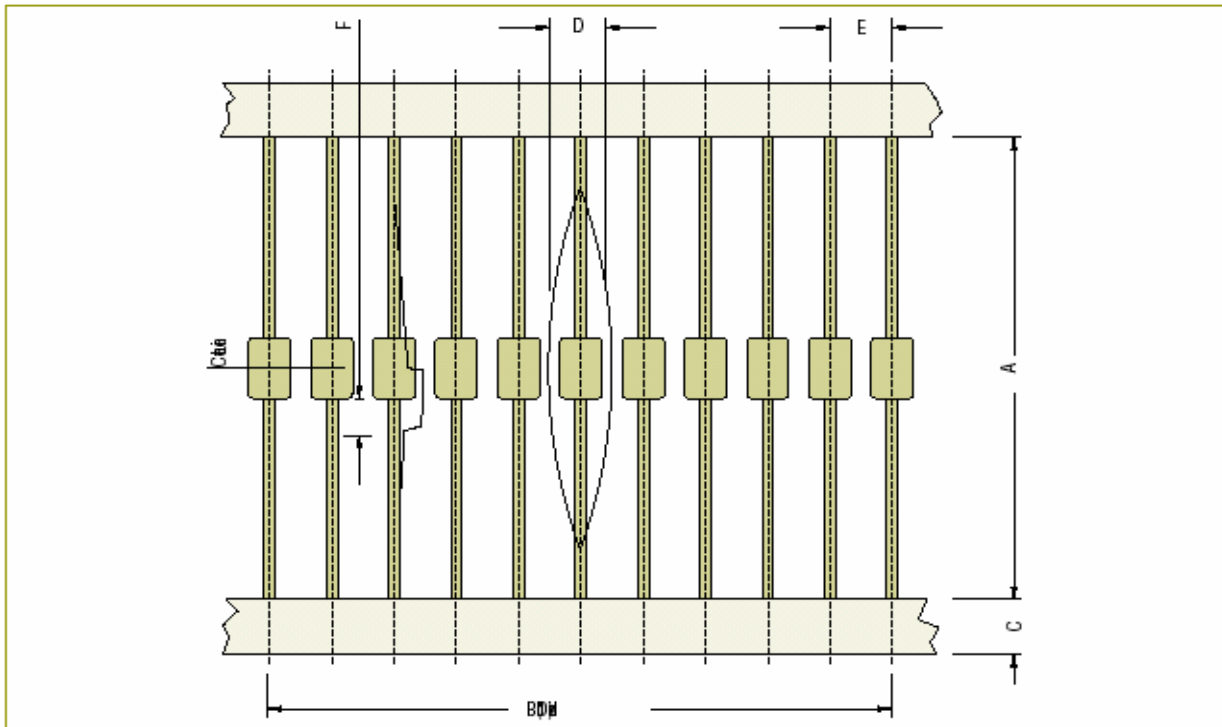


DIM	Min	Max
A	25.40	38.10
B	3.05	5.08
C	0.46	0.55
D	1.53	2.28
L1	—	1.27

Lead diameter not controlled in zone L1 to allow for flash, lead finish build-up and minor irregularities other than heat slugs.

Cathode is marked by a Band

Axial Tape and Ammo Packaging



Axial Tape Specifications

Device	Type	A		B		C		D		E		F	
		mm	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	
DO-35	26 mm	26.0	26.4	48.0	52.0	5.0	6.0	—	1.5R	4.5	5.5	—	0.8
	52 mm	50.0	54.0	48.0	52.0	5.0	6.0	—	1.5R	4.5	5.5	—	1.0

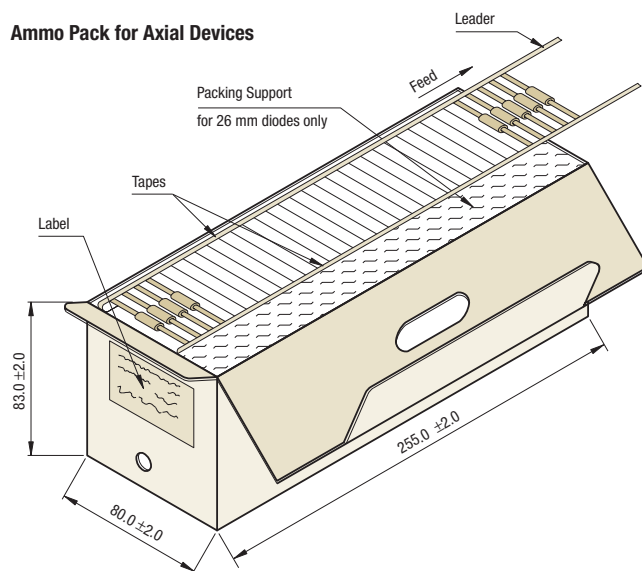
Packaging Specifications ...

T & A: Tape and Ammo Pack; T & R: Tape and Reel; Bulk: Loose in Poly Bags; Tube: Tube and Carton; K: 1,000

Package / Case Type	Packaging Type	Std. Packing	Inner Carton			Outer Carton				
			Qty	Qty	Size L x W x H (cm)	Gross Weight (Kg)	Qty	Size L x W x H (cm)	Gross Weight (Kg)	

Axial Glass/Plastic Packages

DO-35	T & A	5,000	5K	25.5 x 8 x 8.5	0.8	125K	33 x 33 x 51	25.0
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Ammo Pack for Axial Devices**Taping Specification**

- 300 mm (Min) leader tape on every roll.
- No. of empty places allowed 0.25% without consecutive empty places.
- Ends of leads shall normally not protrude beyond the tapes.
- Components shall be held sufficiently in the tape or tapes so that they can not come free in normal handling.

Reference Drawings are not to scale

All Dimensions are in mm

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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