

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 = 25°C)

DESCRIPTION	SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	100	V
Continuous Reverse Voltage	V <sub>R</sub>	75	V
Average Forward Current	I <sub>F (AV)</sub>	150	mA
Forward Current (DC)	l I <sub>F</sub>	200	mA
Repetitive Peak Forward Current	I <sub>FRM</sub>	450	mA
Non Repetitive Peak Surge Current			
tp=1 <b>ms</b>	I <sub>FSM</sub>	2000	mA
tp= 1sec	I <sub>FSM</sub>	500	mA
Power Dissipation	P <sub>TA</sub>	500	mW
Derating Factor		2.85	mW/ ⁰C
Operating and Storage Junction Temperature Range	$T_{j},  T_{stg}$	- 65 to +200	°C

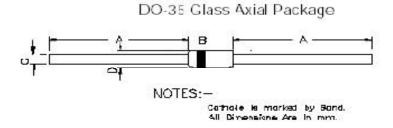
# ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =5mA 1N4448	0.62	0.72	V
		I <sub>F</sub> =10mA 1N4148		1.0	v
		IF=100mA 1N4448		1.0	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =20V		25	nA
		V <sub>R</sub> =75V		5.0	mA
		V <sub>R</sub> =20V, T <sub>j</sub> =150°C		50	mA
		V <sub>R</sub> =75V, T <sub>i</sub> =150°C		100	mA
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>R</sub> =100mA	100		V
		I <sub>R</sub> =5mA	75		V
DYNAMIC CHARACTERISTICS					
Diode Capacitance	Cď	V <sub>R</sub> =0V, f=1MHz		4.0	рF
Forward Recovery Voltage	V <sub>fr</sub>	When Switched from I <sub>F</sub> =50mA, t <sub>r</sub> =20ns		2.5	v
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> =10mA, to I <sub>R</sub> =60mA, R <sub>L</sub> =100 W Measured at I <sub>R</sub> =1mA		4.0	ns

1N4148\_4448 rev 1\_010312

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Dim	Min (mm)	Max (mm)
Α	27.5	
В	2 C	3.9
С	2	0.5
D	2	1.9

#### DC-35. 52mm Taping Specification JO5 MAX 52mm Taping Specification 5.5D 1.5 R. MAX. 4.50 '. T & A ridicates Acial Tape & Ammo packing ŝ (52 mm Tape Specing) 2. 300 mm (min) leader tope on every spoo. No. of empty places clowed 0.25% without consecutive empty places. CENTRE LINE ± 1.05 Ende of leads shall protected, net protrude beyond the topes. 54.00 111 Components shall be held sufficiently in the tape or tapes so that they can not some free in normal handling. 2000 LEADER Doradio 20 52.0 48.0 1 DODES All Dimensions are in mm. TAPES

DO-35 :- 5000 per./Amma pack DIDDE ANMO ⊐ACK

28

on request also available in 26 mm Tape and Ammo Pack

LABE

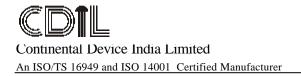
### Packing Detail

FACKAGE D	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qt/	Size	Qy	Dty
EO-35 T&A	5K/ammo pox	0.88kg/5K pcs	10°X3.5°X3.5°	5.OK	1 z 7"X12.7"X23'	125.OK	25Kgs

0.80

Continental Device India Limited

Data Sheet



## **Customer Notes**



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### 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 product), 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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