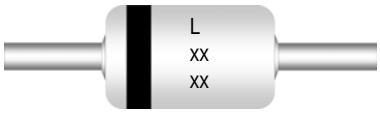
TAK CHEONG®

SEMICONDUCTOR

500 mW DO-35 Hermetically Sealed Glass Fast Switching Diodes

AXIAL LEAD
DO35

DEVICE MARKING DIAGRAM



L : Logo
TC1Nxxxx : Device Code

Absolute Maximum Ratings

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	500	mW
T_{STG}	Storage Temperature Range	-65 to +150	°C
T_J	Operating Junction Temperature	+175	°C
W_{IV}	Working Inverse Voltage	75	V
I_O	Average Rectified Current	150	mA
I_{FM}	Non-repetitive Peak Forward Current	450	mA
I_{FSURGE}	Peak Forward Surge Current (Pulse Width = 1.0 µsecond)	2	A

These ratings are limiting values above which the serviceability of the diode may be impaired.

Specification Features:

- Fast Switching Device (T_{RR} <4.0 nS)
- DO-35 Package (JEDEC)
- Through-Hole Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All External Surfaces Are Corrosion Resistant And Leads Are Readily Solderable
- RoHS Compliant
- Solder Hot Dip Tin (Sn) Terminal Finish
- Cathode Indicated By Polarity Band

ELECTRICAL SYMBOL

Electrical Characteristics

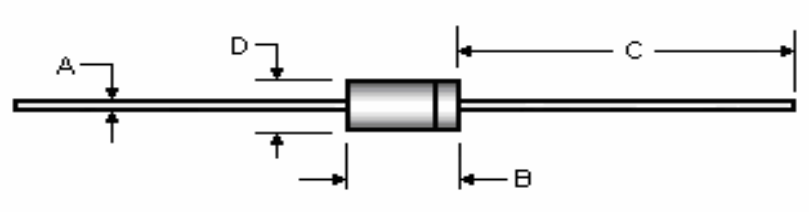
T_A = 25°C unless otherwise noted

Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
B_V	Breakdown Voltage	I_R=100µA	100		Volts
		I_R=5µA	75		
I_R	Reverse Leakage Current	V_R=20V		25	nA
		V_R=75V		5	µA
V_F	Forward Voltage TC1N4448, TC1N914B	I_F=5mA	0.62	0.72	
	TC1N4148	I_F=10mA		1.0	Volts
	TC1N4448, TC1N914B	I_F=100mA		1.0	
T_{RR}	Reverse Recovery Time	I_F=10mA, V_R=6V			
		R_L=100Ω		4	nS
		I_{RR}=1mA			
C	Capacitance	V_R=0V, f=1M_{HZ}		4	pF

Package Outline

Package	Case Outline

DO-35



DIM	DO-35			
	Millimeters		Inches	
	Min	Max	Min	Max
A	0.46	0.55	0.018	0.022
B	3.05	5.08	0.120	0.200
C	25.40	38.10	1.000	1.500
D	1.53	2.28	0.060	0.090

Notes:

1. All dimensions are within JEDEC standard.
2. DO35 polarity denoted by cathode band.

This datasheet presents technical data of Tak Cheong's Switching Diodes. Complete specifications for the individual devices are provided in the form of datasheets. A comprehensive Selector Guide is included to simplify the task of choosing the best set of components required for a specific application. For additional information, please visit our website http://www.takcheong.com.

Although information in this datasheet has been carefully checked, no responsibility for the inaccuracies can be assumed by Tak Cheong. Please consult your nearest Tak Cheong's sales office for further assistance.

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