TAK CHEONG®

SEMICONDUCTOR

500 mW DO-35 Hermetically Sealed Glass Zener Voltage Regulators

AXIAL LEAD
DO35

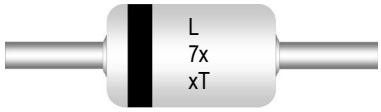
Absolute Maximum Ratings

T_A = 25°C unless otherwise noted

Parameter	Value	Units
Power Dissipation	500	mW
Storage Temperature Range	-65 to +200	°C
Operating Junction Temperature	+200	°C

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

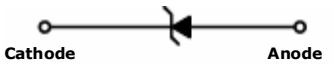
DEVICE MARKING DIAGRAM



L : Logo
Device Code : TC1N7xxT
Tolerance (T) : (Blank) = 10%
A = 5%
C = 2%
D = 1%

Specification Features:

- Zener Voltage Range 3.3 to 12 Volts
- 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) Lead Finish
- Cathode Indicated By Polarity Band



ELECTRICAL SYMBOL

Electrical Characteristics

T_A = 25°C unless otherwise noted

Device Type	V_Z @ I_{ZT} (Volts) Nominal	I_{ZT} (mA)	Z_{ZT} @ I_{ZT} (Ω) Max	I_R @ V_R (μA) Max	V_R (Volt)
TC1N746A	3.3	20	28	10	1
TC1N747A	3.6	20	24	10	1
TC1N748A	3.9	20	23	10	1
TC1N749A	4.3	20	22	2	1
TC1N750A	4.7	20	19	2	1
TC1N751A	5.1	20	17	1	1
TC1N752A	5.6	20	11	1	1
TC1N753A	6.2	20	7	0.1	1
TC1N754A	6.8	20	5	0.1	1
TC1N755A	7.5	20	6	0.1	1
TC1N756A	8.2	20	8	0.1	1
TC1N757A	9.1	20	10	0.1	1
TC1N758A	10	20	17	0.1	1
TC1N759A	12	20	30	0.1	1

V_F Forward Voltage = 1.5 V Maximum @ I_F = 200 mA for all types

Notes:

1. TOLERANCE AND VOLTAGE DESIGNATION

The type numbers listed have zener voltage as shown and have a standard tolerance on the nominal zener voltage of ±5%. Suffix (BLANK) = ±10%, Suffix C = ±2% and D = ±1%.

2. SPECIALS AVAILABLE INCLUDE

Nominal zener voltages between the voltages shown and tighter voltage, for detailed information on price, availability and delivery, contact you nearest Tak Cheong representative.

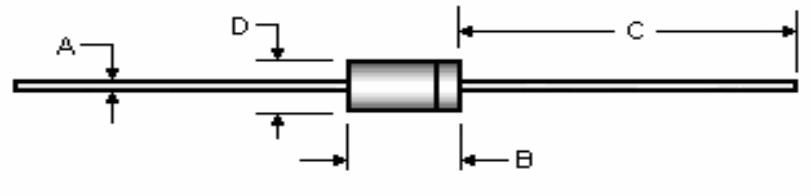
3. ZENER VOLTAGE (V_Z) MEASUREMENT

The zener voltage ($\mathbf{V_Z}$) is tested under pulse condition.

4. ZENER IMPEDANCE (Z_Z) DERIVATION

Zener impedance is derived from the 60-cycle ac voltage, which results when an ac current having an RMS value equal to 10% of the dc zener current ($\mathbf{I_{ZT}}$) is superimposed to $\mathbf{I_{ZT}}$.

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.

NOTICE

The information presented in this document is for reference only. Tak Cheong reserves the right to make changes without notice for the specification of the products displayed herein.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Tak Cheong Semiconductor Co., Ltd., or anyone on its behalf, assumes no responsibility or liability for any damagers resulting from such improper use of sale.

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