

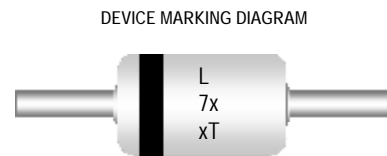
# 500 mW DO-35 Hermetically Sealed Glass Zener Voltage Regulators



## Absolute Maximum Ratings T<sub>A</sub> = 25°C unless otherwise noted

Parameter	Value	Units
Power Dissipation	500	mW
Storage Temperature Range	-65 to +175	°C
Operating Junction Temperature	+175	°C

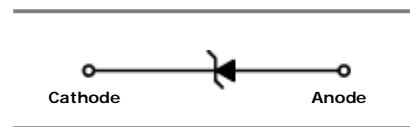
These ratings are limiting values above which the serviceability of the diode may be impaired.



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 Characteristics T<sub>A</sub> = 25°C unless otherwise noted

Device Type	V <sub>Z</sub> @ I <sub>ZT</sub> (Volts) Nominal	I <sub>ZT</sub> (mA)	Z <sub>ZT</sub> @ I <sub>ZT</sub> (Ω) Max	I <sub>R</sub> @ V <sub>R</sub> (μA) Max	V <sub>R</sub> (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<sub>F</sub> Forward Voltage = 1.5 V Maximum @ I<sub>F</sub> = 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  $\pm 5\%$ . Suffix (BLANK) =  $\pm 10\%$ , Suffix C =  $\pm 2\%$  and D =  $\pm 1\%$ .

**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.

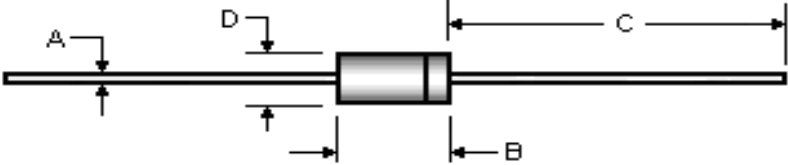
**3. ZENER VOLTAGE ( $V_Z$ ) MEASUREMENT**

The zener voltage ( $V_Z$ ) 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 ( $I_{ZT}$ ) is superimposed to  $I_{ZT}$ .

Package Outline

Package	Case Outline				
DO-35					
	<b>DO-35</b>				
	<b>DIM</b>	<b>Millimeters</b>		<b>Inches</b>	
		Min	Max	Min	Max
	<b>A</b>	0.46	0.55	0.018	0.022
	<b>B</b>	---	5.08	---	0.200
<b>C</b>	25.40	38.10	1.000	1.500	
<b>D</b>	1.53	2.28	0.060	0.090	

Notes:

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