

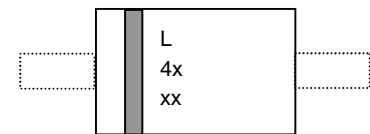
500 mW DO-35 Hermetically Sealed Glass Zener Voltage Regulators



Maximum Ratings (Note 1)

Rating	Symbol	Value	Units
Maximum Steady State Power Dissipation @ TL ≤ 75°C, Lead Length = 3/8"	P _D	500	mW
Derate Above 75°C		4.0	mW/°C
Operating and Storage Temperature Range	T _J , T _{stg}	-65 to +200	°C

Note 1: Some part number series have lower JEDEC registered ratings.



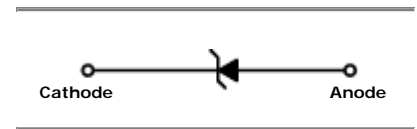
L = Logo
43xxA = 1N43xxA Device Code

Specification Features:

- § Zener Voltage Range = 1.8V to 43V
- § ESD Rating of Class 3 (>6 KV) per Human Body Model
- § DO-35 Package (DO-204AH)
- § Double Slug Type Construction
- § Former Metallurgical Bonded Construction
- § RoHS Compliant
- § Solder Hot Dip Tin (Sn) Lead Finish

Specification Features:

- Case** : Double slug type, hermetically sealed glass
- Finish** : All external surfaces are corrosion resistant and leads are readily solderable
- Polarity** : Cathode indicated by polarity band
- Mounting:** Any



ELECTRICAL CHARACTERIZATION (T_A = 25°C unless otherwise noted)

Device (Note 2.)	Device Marking	Zener Voltage (Note 3.)				Leakage Current			I _{ZM} (Note 4.) (mA)	ΔV _Z (Note 5.)
		V _Z (Volts)			@I _{ZT}	IR @VR				
		Min	Nom	Max	(uA)	(uA Max)	(Volts)			
1N4685	1N4685	3.420	3.6	3.780	50	7.5	2	75	0.95	
1N4686	1N4686	3.705	3.9	4.095	50	5	2	70	0.97	
1N4687	1N4687	4.085	4.3	4.515	50	4	2	65	0.99	
1N4688	1N4688	4.465	4.7	4.935	50	10	3	60	0.99	
1N4689	1N4689	4.845	5.1	5.355	50	10	3	55	0.97	
1N4690	1N4690	5.320	5.6	5.880	50	10	4	50	0.96	

V_F Forward Voltage = 1.5V max @ I_F = 100mA for all types

2. TOLERANCE AND VOLTAGE DESIGNATION

The type numbers listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$.

3. ZENER VOLTAGE (V_Z) MEASUREMENT

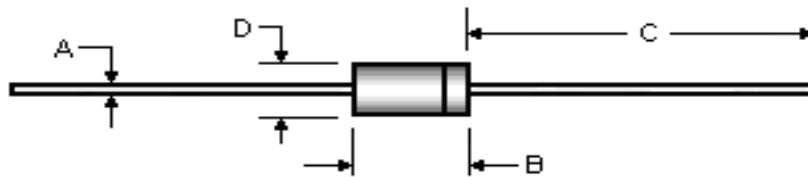
The zener voltage (V_Z) is tested under pulse condition. The measured V_Z is guaranteed to be within specification with device junction in thermal equilibrium.

4. MAXIMUM ZENER CURRENT RATINGS (I_{ZM})

Maximum zener current rating is based on maximum zener voltage of the individual units and JEDEC 250mW rating.

5. MAXIMUM VOLTAGE CHANGE (ΔV_Z)

Voltage change is equal to the difference between V_Z at 100uA and at 10uA.

Package Outline
Case Outline


DIM	DO-35			
	Millimeters		Inches	
	Min	Max	Min	Max
A	0.46	0.56	0.018	0.022
B	3.05	5.08	0.120	0.200
C	25.40	38.10	1.000	1.500
D	1.52	2.29	0.060	0.090

Note: all dimensions are within JEDEC standard.