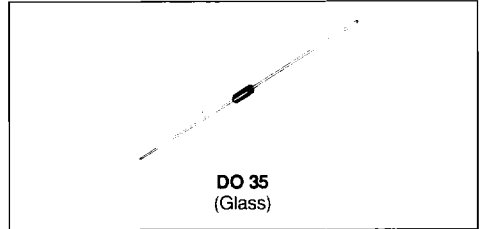




TEMPERATURE COMPENSATED ZENER DIODES

- SEMICONDUCTOR MATERIAL : SILICON
- TECHNOLOGY : LOCAL EPITAXY + GUARD RING



ABSOLUTE RATINGS (limiting values)

Symbol	Parameter	Value	Unit
P_{tot}	Power Dissipation*	0.4	W
T_{stg}	Storage and Junction Temperature Range	- 65 to 175	°C
T_j		- 55 to 175	°C
T_L	Maximum Lead Temperature for Soldering during 10s at 4mm from Case	230	°C

THERMAL RESISTANCE

Symbol	Parameter	Value	Unit
$R_{th(j-a)}$	Junction-ambient*	375	°C/W

ELECTRICAL CHARACTERISTICS ($T_{amb} = 25^\circ\text{C}$ unless otherwise specified)

Types	V_{ZT} typ. (V)	R_{ZT} @ max. (Ω)	I_{ZT} (mA)	Test Temperatures					ΔV_Z^{**} max. (mV)	αV_Z ($10^{-6}/^\circ\text{C}$)
				(°C)						
1N 3154	8.4	15	10	- 55	0	+ 25	+ 75	+ 100	130	100
1N 3155	8.4	15	10	- 55	0	+ 25	+ 75	+ 100	65	50
1N 3156	8.4	15	10	- 55	0	+ 25	+ 75	+ 100	26	20
1N 3157	8.4	15	10	- 55	0	+ 25	+ 75	+ 100	13	10
1N 3154 A	8.4	15	10	- 55	0	+ 25	+ 75	+ 100 +150	172	100
1N 3155 A	8.4	15	10	- 55	0	+ 25	+ 75	+ 100 +150	86	50
1N 3156 A	8.4	15	10	- 55	0	+ 25	+ 75	+ 100 +150	34	20
1N 3157 A	8.4	15	10	- 55	0	+ 25	+ 75	+ 100 +150	17	10

* On infinite heatsink with $d = 4\text{mm}$

** The voltage reference diodes are characterized by the box method. The maximum allowable voltage change ΔV_Z is guaranteed any two temperature within the range. Tests are performed at the indicated temperatures and the specified current.

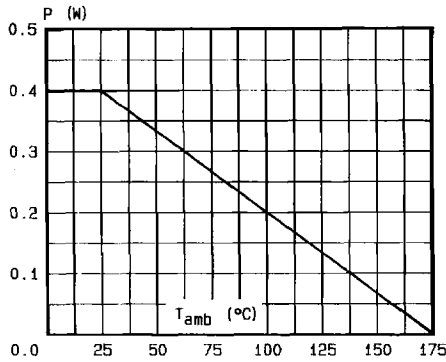


Fig.1 - Power dissipation versus ambient temperature.

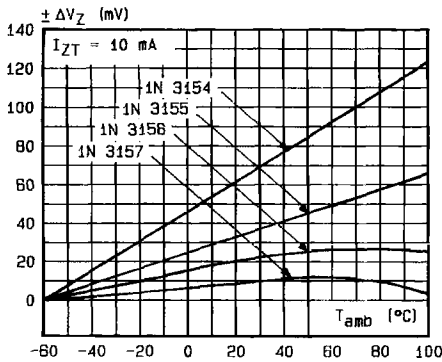


Fig.2a - Regulation voltage variation versus ambient temperature.

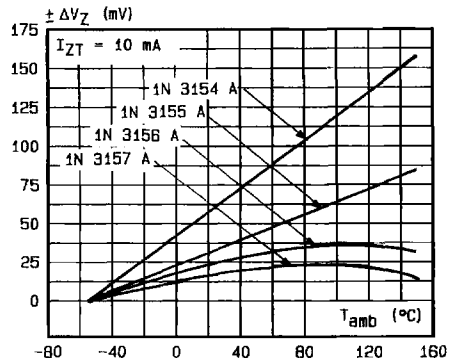
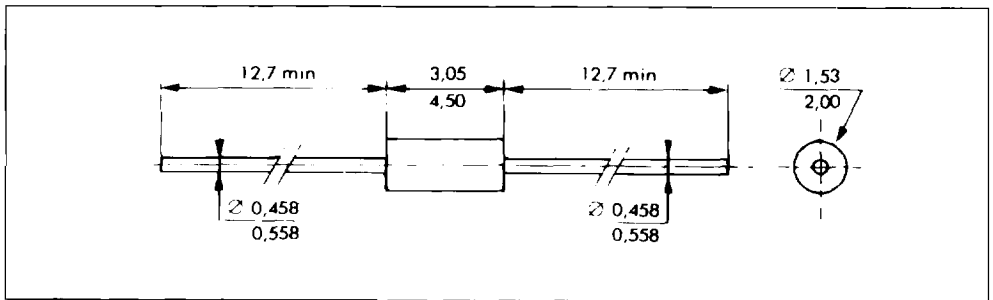


Fig.2b - Regulation voltage variation versus ambient temperature.

PACKAGE MECHANICAL DATA

DO 35 Glass



Cooling method : by convection and conduction.
 Marking : clear, ring at cathode end.
 Weight : 0.15g.