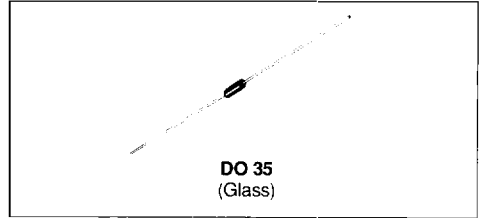




**TEMPERATURE COMPENSATED ZENER DIODES**

**NEW SERIE**

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



**ABSOLUTE RATINGS** (limiting values)

Symbol	Parameter	Value	Unit
$P_{tot}$	Power Dissipation* $T_{amb} = 50^{\circ}C$	0.4	W
$T_{stg}$ $T_j$	Storage and Junction Temperature Range	- 65 to 175 - 65 to 175	$^{\circ}C$ $^{\circ}C$
$T_L$	Maximum Lead Temperature for Soldering during 10s at 4mm from Case	230	$^{\circ}C$

**THERMAL RESISTANCE**

Symbol	Parameter	Value	Unit
$R_{th(j-a)}$	Junction-ambient*	300	$^{\circ}C/W$

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

Types	$V_{ZT}$ typ. (V)	$R_{ZT}$ @ max. ( $\Omega$ )	$I_{ZT}$ (mA)	Test Temperatures ( $^{\circ}C$ )			$\Delta V_Z^{**}$ max. (mV)	$\alpha V_Z$ ( $10^{-6}/^{\circ}C$ )
<b>1N 4765</b>	9.1	350	0.5	0	+ 25	+ 75	68	100
<b>1N 4766</b>	9.1	350	0.5	0	+ 25	+ 75	34	50
<b>1N 4767</b>	9.1	350	0.5	0	+ 25	+ 75	14	20
<b>1N 4768</b>	9.1	350	0.5	0	+ 25	+ 75	7	10
<b>1N 4769</b>	9.1	350	0.5	0	+ 25	+ 75	3	5
<b>1N 4765 A</b>	9.1	350	0.5	- 55	0	+ 25 + 75 + 100	141	100
<b>1N 4766 A</b>	9.1	350	0.5	- 55	0	+ 25 + 75 + 100	70	50
<b>1N 4767 A</b>	9.1	350	0.5	- 55	0	+ 25 + 75 + 100	28	20
<b>1N 4768 A</b>	9.1	350	0.5	- 55	0	+ 25 + 75 + 100	14	10
<b>1N 4769 A</b>	9.1	350	0.5	- 55	0	+ 25 + 75 + 100	7	5

\* On infinite heatsink with  $d = 4mm$

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

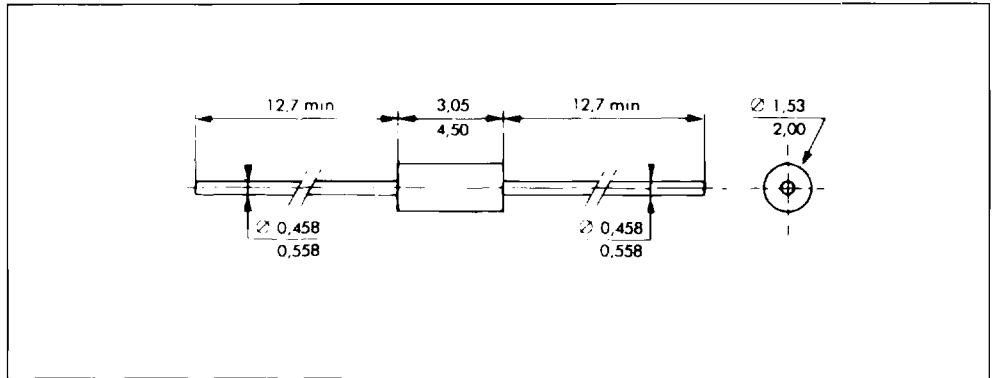
**ELECTRICAL CHARACTERISTICS** ( $T_{amb} = 25^{\circ}\text{C}$  unless otherwise specified) (continued)

Types	$V_{ZT}$ typ. (V)	$R_{ZT}$ @ max. ( $\Omega$ )	$I_{ZT}$ (mA)	Test Temperatures			$\Delta V_{Z}^*$ max. (mV)	$\alpha V_{Z}$ ( $10^{-6}/^{\circ}\text{C}$ )
				(°C)				
1N 4770	9.1	350	0.5	0	+25	+75	68	100
1N 4771	9.1	350	0.5	0	+25	+75	34	50
1N 4772	9.1	350	0.5	0	+25	+75	14	20
1N 4773	9.1	350	0.5	0	+25	+75	7	10
1N 4774	9.1	350	0.5	0	+25	+75	3	5
1N 4770 A	9.1	350	0.5	-55	0	+25 +75 +100	141	100
1N 4771 A	9.1	350	0.5	-55	0	+25 +75 +100	70	50
1N 4772 A	9.1	350	0.5	-55	0	+25 +75 +100	28	20
1N 4773 A	9.1	350	0.5	-55	0	+25 +75 +100	14	10
1N 4774 A	9.1	350	0.5	-55	0	+25 +75 +100	7	5

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

**PACKAGE MECHANICAL DATA**

DO 35 Glass



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

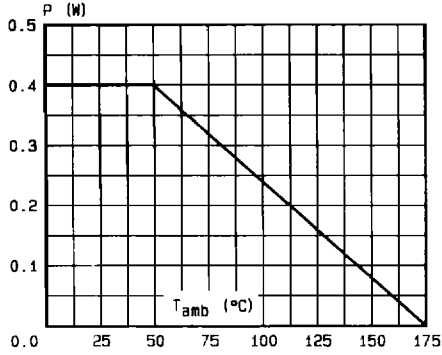


Fig.1 - Power dissipation versus ambient temperature.

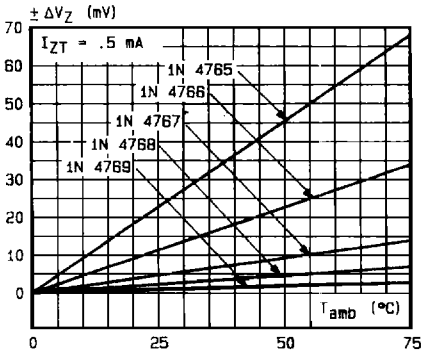


Fig.2a - Regulation voltage variation versus ambient temperature.

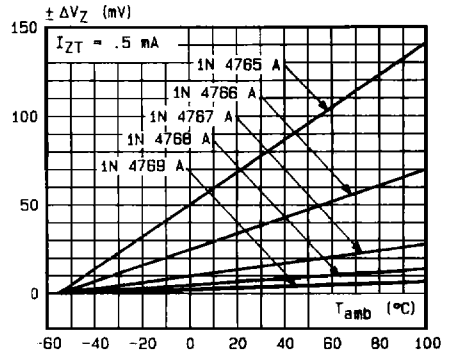


Fig.2b - Regulation voltage variation versus ambient temperature.

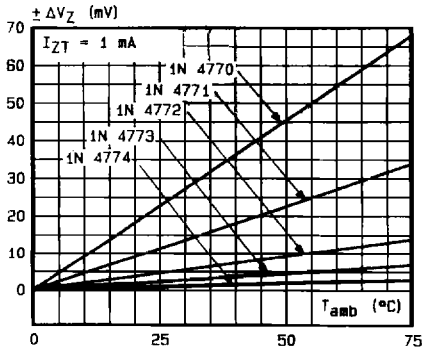


Fig.2c - Regulation voltage variation versus ambient temperature.

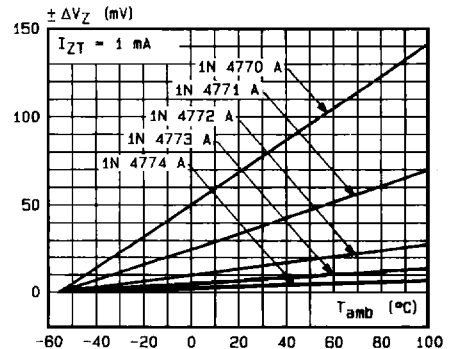


Fig.2d - Regulation voltage variation versus ambient temperature.