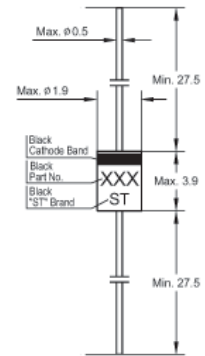


**SILICON PLANAR ZENER DIODES**

Standard Zener voltage tolerance is  $\pm 20\%$ . Add suffix "A" for  $\pm 10\%$  tolerance and suffix "B" for  $\pm 5\%$  tolerance. Other tolerances, non standard and higher Zener voltages are upon request.



Glass Case DO-35  
Dimensions in mm

**Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )**

Parameter	Symbol	Value	Unit
Power Dissipation	$P_{tot}$	500 <sup>1)</sup>	mW
Junction Temperature	$T_J$	175	$^\circ\text{C}$
Storage Temperature Range	$T_S$	- 65 to + 175	$^\circ\text{C}$

<sup>1)</sup> Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case

**Characteristics at  $T_a = 25\text{ }^\circ\text{C}$**

Parameter	Symbol	Max.	Unit
Thermal Resistance Junction to Ambient Air	$R_{thA}$	0.3 <sup>1)</sup>	K/mW
Forward Voltage at $I_F = 200\text{ mA}$	$V_F$	1.5	V

<sup>1)</sup> Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.

Characteristics at  $T_a = 25\text{ }^\circ\text{C}$

Type	Zener Voltage Range <sup>1)</sup>		Maximum Dynamic resistance			Maximum Reverse Leakage Current <sup>2)</sup>			Maximum Regulator Current $I_{ZM}$ (mA)
	$V_{Znom}$	$I_{ZT}$	$r_{zjT}$	at $I_{ZK}$		$I_R$	Test-Voltage ( $V_R$ )		
							Suffix A	Suffix B	
V	mA	$\Omega$	$\Omega$	mA	$\mu\text{A}$	V	V		
1N957	6.8	18.5	4.5	700	1	150	4.9	5.2	47
1N958	7.5	16.5	5.5	700	0.5	75	5.4	5.7	42
1N959	8.2	15	6.5	700	0.5	50	5.9	6.2	38
1N960	9.1	14	7.5	700	0.5	25	6.6	6.9	35
1N961	10	12.5	8.5	700	0.25	10	7.2	7.6	32
1N962	11	11.5	9.5	700	0.25	5	8	8.4	28
1N963	12	10.5	11.5	700	0.25	5	8.6	9.1	26
1N964	13	9.5	13	700	0.25	5	9.4	9.9	24
1N965	15	8.5	16	700	0.25	5	10.8	11.4	21
1N966	16	7.8	17	700	0.25	5	11.5	12.2	19
1N967	18	7	21	750	0.25	5	13	13.7	17
1N968	20	6.2	25	750	0.25	5	14.4	15.2	15
1N969	22	5.6	29	750	0.25	5	15.8	16.7	14
1N970	24	5.2	33	750	0.25	5	17.3	18.2	13
1N971	27	4.6	41	750	0.25	5	19.4	20.6	11
1N972	30	4.2	49	1000	0.25	5	21.6	22.8	10
1N973	33	3.8	58	1000	0.25	5	23.8	25.1	9
1N974	36	3.4	70	1000	0.25	5	25.9	27.4	8.5
1N975	39	3.2	80	1000	0.25	5	28.1	29.7	7.8
1N976	43	3	93	1500	0.25	5	31	32.7	7
1N977	47	2.7	105	1500	0.25	5	33.8	35.8	6.4
1N978	51	2.5	125	1500	0.25	5	36.7	38.8	5.9

<sup>1)</sup> Tested with pulses  $t_p = 20\text{ ms}$

<sup>2)</sup> Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.

