CE

CHENYI ELECTRONICS

1N957 THRU 1N978

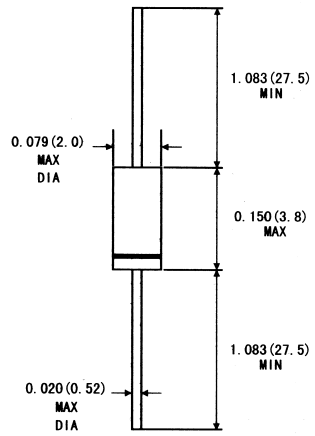
0.5W SILICON PLANAR ZENER DIODES

FEATURES

. Silicon planar power zener diodes

. Standards zener voltage tolerance is±20%.Add suffix "A" for ±10% tolerance and suffix "B" for±5% tolerance other tolerance, non standards and higher zener voltage upon request

DO-35



Dimensions in inches and (millimeters)

MECHANICAL DATA

. **Case**: DO-35 glass case

. **Polarity**: Color band denotes cathode end

. **Weight**: Approx. 0.13gram

ABSOLUTE MAXIMUM RATINGS(LIMITING VALUES)(TA=25℃)

	Symbols	Value	Units
Zener current see table "Characteristics"			
Power dissipation at TA=75℃	Ptot	500 1)	mW
Junction temperature	TJ	175	℃
Storage temperature range	TSTG	-65 to + 175	℃
1)Valid provided that at a distance of 8mm from case are kept at ambient temperature(DO-35)			

ELECTRICAL CHARACTERISTICS(TA=25℃)

	Symbols	Min.	Typ.	Max.	Units
Thermal resistance junction to ambient	RθJA			300 1)	℃/W
Forward voltage at IF=200mA	VF			1.5	
1)Valid provided that leads at a distance of 8mm from case are kept at ambient temperature					

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Type	Zener Voltage Range3)		Maximum zener impedence1)			Typical Tempetature coefficient	Maximum Reverse Leakage Current			Maximum Regulator Current
							IR 2)	Test-Voltage		
	VZNOM	IZT	ZZT	ZZK	IZK			suffix A	suffix B	IZM 2)
	V	mA	Ω	Ω	mA	%/℃	μA	V	V	mA
1N957	6.8	18.5	4.5	700	1	0.050	150	4.9	5.2	47
1N958	7.5	16.5	5.5		0.5	0.058	75	5.4	5.7	42
1N959	8.2	15				0.062	50	5.9	6.2	38
1N960	9.1	14				0.068	10	6.6	6.9	35
1N961	10	12.5			0.25	0.075	5	7.2	7.6	32
1N962	11	11.5	5			0.076		8	8.4	28
1N963	12	10.5	11.5			0.077		8.6	9.1	26
1N964	13	9.5	13			0.079	5	9.4	9.9	24
1N965	15	8.5	16			0.082		10.8	11.4	21
1N966	16	7.8	17			0.083		11.5	12.2	19
1N967	18	7	21	750		0.085		13	13.7	17
1N968	20	6.2	25			0.086		14.4	15.2	15
1N969	22	5.6	29			0.087		15.8	16.7	14
1N970	24	5.2	33			0.088		17.3	18.2	14
1N971	27	4.6	41			0.090		19.4	20.6	11
1N972	30	4.2	49	1000		0.091		21.6	22.8	10
1N973	33	3.8	58			0.092		23.8	25.1	9.0
1N974	36	3.4	70			0.093		25.9	27.4	8.5
1N975	39	3.2	80			0.094		28.1	29.7	7.8
1N976	43	3	93	1500		0.095		31	32.7	7.0
1N977	47	2.7	105			0.095		33.8	35.8	6.4
1N978	51	2.5	125			0.096		36.7	38.8	5.9

Notes:

(1)The Zener impedance is derived from the 1kHz Ac voltage which results when an AC current having an RMS value equal to 10% of the Zener current (IZT) is suprimposed on IZT Zener impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.

(2)Valid provided that leads are kept at ambient temperature at a distance of 8mm from case

(3) Measured with device junction in thermal equilibrium.