CE

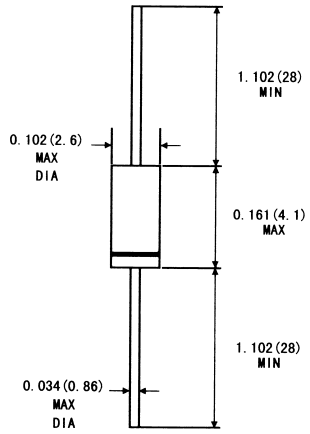
CHENYI ELECTRONICS

1N4728 THRU 1N4764

1W SILICON PLANAR ZENER DIODES

FEATURES

DO-41(GLASS)



Dimensions in inches and (millimeters)

. Silicon planar power zener diodes
For use in stabilizing and clipping circuits with high power rating.

. Standaards Zener voltage toerance is± 10%
Add suffix"A" for± 5% tolerance Other tolerance available upon request

MECHANICAL DATA

. **Case:** DO-41 glass case

.**weight:** Approx. 0.35 gram

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

	Symbols	Value	Units
Zener current see table "Characteristics"			
Power dissipation at TA=25℃	Ptot	1 1)	mW
Junction temperature	T_J	175	℃
Storage temperature range	T_{STG}	-65 to +175	℃
1)Valid provided that a distance of 8mm from case are kept at ambient temperature			

ELECTRCAL CHARACTERISTICS(T_A=25℃)

	Symbols	Min	Typ	Max	Units
Thermal resistance junction to ambient	R_{thA}			170 1)	℃/W
Forward voltage at IF=200mA	V_F			1.2	V
1) Valid provided that a distance at 8mm from case are kept at ambient temperature					

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Type	Nominal Zener Voltage 3)	Test Current	Maximum Zener Impedance 1)			Maximum reverse leakage current		Surge current	Maximum regulator Current 2)
	at I_{ZT} V_Z V	I_{ZT} mA	at I_{ZT} Z_{ZT} Ω	Z_{ZK} Ω	at I_{ZK} mA	I_R μA	at V_R V	at T_A=0.25 IR mA	IZM mA
1N4728	3.3	76	10	400	1.0	100	1.0	1380	276
1N4729	3.6	69	10				1.0	1260	252
1N4730	3.9	64	9			50	1.0	1190	234
1N4731	4.3	58	9			10	1.0	1070	217
1N4732	4.7	53	8	500			1.0	970	193
1N4733	5.1	49	7	550			1.0	890	178
1N4734	5.6	45	5	600			2.0	810	162
1N4735	6.2	41	2	700			3.0	730	146
1N4736	6.8	37	3.5				4.0	660	133
1N4737	7.5	34	4.0		5.0		5.0	605	121
1N4738	8.2	31	4.5				6.0	550	110
1N4739	9.1	28	5.0				7.0	500	100
1N4740	10	25	7		0.25		7.6	454	91
1N4741	11	23	8			5	8.4	414	83
1N4742	12	21	9				9.1	380	76
1N4743	13	19	10				9.9	344	69
1N4744	15	17	14				11.4	304	61
1N4745	16	15.5	16				12.2	285	57
1N4746	18	14	20	750			13.7	250	50
1N4747	20	12.5	22				15.2	225	45
1N4748	22	11.5	23				16.7	205	41
1N4749	24	10.5	25				18.2	190	38
1N4750	27	9.5	35				20.6	170	34
1N4751	30	8.5	40	1000			22.8	150	30
1N4752	33	7.5	45				25.1	135	27
1N4753	36	7.0	50				27.4	125	25
1N4754	39	6.5	60				29.7	115	23
1N4755	43	6.0	70	1500			32.7	110	22
1N4756	47	5.5	80				35.8	95	19
1N4757	51	5.0	95				38.8	90	18
1N4758	56	4.5	110	2000			42.6	80	16
1N4759	62	4.0	125				47.1	70	14
1N4760	68	3.7	150				51.7	65	13
1N4761	75	3.3	175				56.0	60	12
1N4762	82	3.0	200	3000			62.2	55	11
1N4763	91	2.8	250				69.2	50	10
1N4764	100	2.5	350				76.0	45	9

Notes:1) The Zener impedance is derived from the 1KHz AC voltage which results when an AC current having an RMS calue equal to 10% of the Zener current(IZT or IZK) is superimposed on IZT or IZK. 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 electrodes at a distance of 10mm from case are kept at ambient temperature

3)Measured under thermal equilibriun and DC test conditions.

RATINGS AND CHARACTERISTIC CURVES 1N4728 THRI 1N4764

Admissible power dissipation versus ambient temperature (Valid provided that leads at a distance of 10mm from case are kept at ambient temperature)