

1N4728A through 1N4753A

Silicon Epitaxial Planar Zener Diodes
for Stabilized Power Supply

HITACHI

ADE-208-136A (Z)
Rev. 1

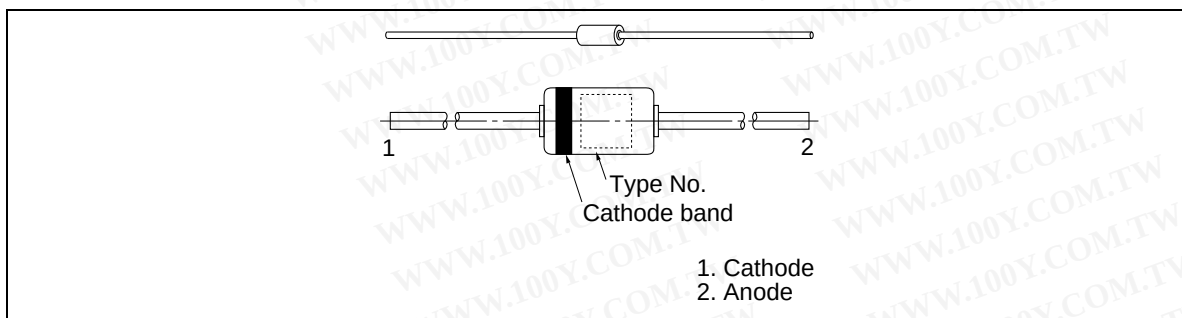
Features

- Glass package DO-41 structure ensures high reliability.
- Wide spectrum from 3.3V through 36V of zener voltage provide flexible application.

Ordering Information

Type No.	Mark	Package Code
1N4728A through 1N4753A	Type No.	DO-41

Outline



勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-54151736
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

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

Item	Symbol	Value	Unit
Power dissipation	P_d^{*1}	1.0	W
Junction temperature	T_j	200	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-65 to +200	$^{\circ}\text{C}$

Note 1. See Fig.3

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Electrical Characteristics (Ta = 25°C)

	V_z (V)* ¹		I_r (μA)		Z_{zT} (Ω)		Z_{zK} (Ω)		I_{RSM} (mA)* ²	
	Max	Test Condition I_z (mA)	Max	Test Condition V_R (V)	Max	Test Condition I_{zT} (mA)	Max	Test Condition I_{zK} (mA)	Max	
1N4728A	3.3 ± 5 (%)	76	100	1.0	10	76	400	1.0	1380	
1N4729A	3.6 ± 5 (%)	69	100	1.0	10	69	400	1.0	1260	
1N4730A	3.9 ± 5 (%)	64	50	1.0	9	64	400	1.0	1190	
1N4731A	4.3 ± 5 (%)	58	10	1.0	9	58	400	1.0	1070	
1N4732A	4.7 ± 5 (%)	53	10	1.0	8	53	500	1.0	970	
1N4733A	5.1 ± 5 (%)	49	10	1.0	7	49	550	1.0	890	
1N4734A	5.6 ± 5 (%)	45	10	2.0	5	45	600	1.0	810	
1N4735A	6.2 ± 5 (%)	41	10	3.0	2	41	700	1.0	730	
1N4736A	6.8 ± 5 (%)	37	10	4.0	3.5	37	700	1.0	660	
1N4737A	7.5 ± 5 (%)	34	10	5.0	4	34	700	0.5	605	
1N4738A	8.2 ± 5 (%)	31	10	6.0	4.5	31	700	0.5	550	
1N4739A	9.1 ± 5 (%)	28	10	7.0	5	28	700	0.5	500	
1N4740A	10 ± 5 (%)	25	10	7.6	7	25	700	0.25	454	
1N4741A	11 ± 5 (%)	23	5	8.4	8	23	700	0.25	414	
1N4742A	12 ± 5 (%)	21	5	9.1	9	21	700	0.25	380	
1N4743A	13 ± 5 (%)	19	5	9.9	10	19	700	0.25	344	
1N4744A	15 ± 5 (%)	17	5	11.4	14	17	700	0.25	304	
1N4745A	16 ± 5 (%)	15.5	5	12.2	16	15.5	700	0.25	285	
1N4746A	18 ± 5 (%)	14.0	5	13.7	20	14.0	750	0.25	250	
1N4747A	20 ± 5 (%)	12.5	5	15.2	22	12.5	750	0.25	225	
1N4748A	22 ± 5 (%)	11.5	5	16.7	23	11.5	750	0.25	205	
1N4749A	24 ± 5 (%)	10.5	5	18.2	25	10.5	750	0.25	190	
1N4750A	27 ± 5 (%)	9.5	5	20.6	35	9.5	750	0.25	170	
1N4751A	30 ± 5 (%)	8.5	5	22.8	40	8.5	1000	0.25	150	
1N4752A	33 ± 5 (%)	7.5	5	25.1	45	7.5	1000	0.25	135	
1N4753A	36 ± 5 (%)	7.0	5	27.4	50	7.0	1000	0.25	125	

Note 1. Tested with DC

Note 2. t=1/120 sec reverse direction 1pulse

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Main Characteristic

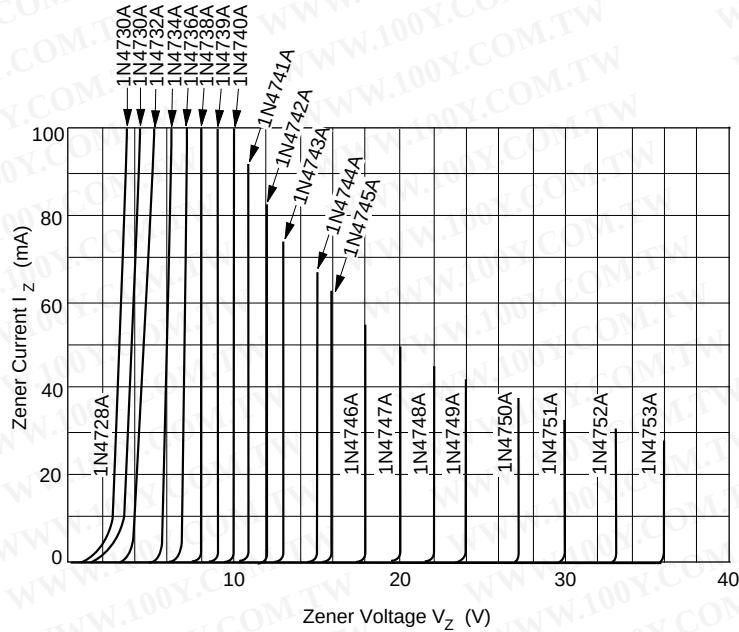


Fig.1 Zener current Vs. Zener voltage

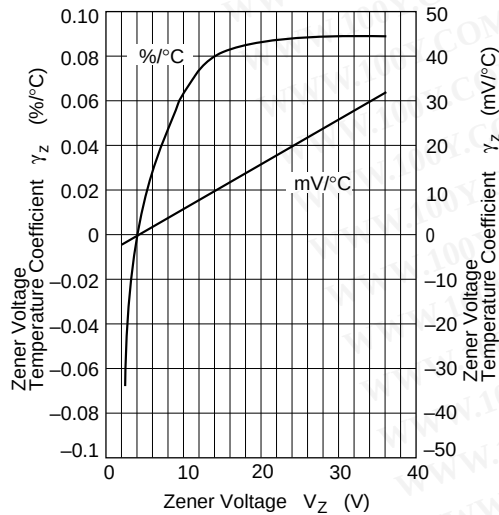


Fig.2 Temperature Coefficient Vs. Zener voltage

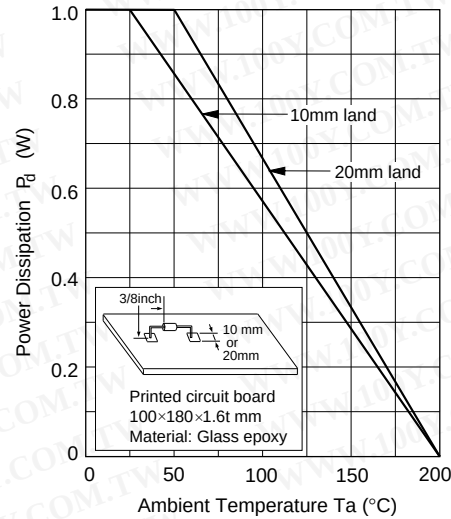


Fig.3 Power Dissipation Vs. Ambient Temperature

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Main Characteristic

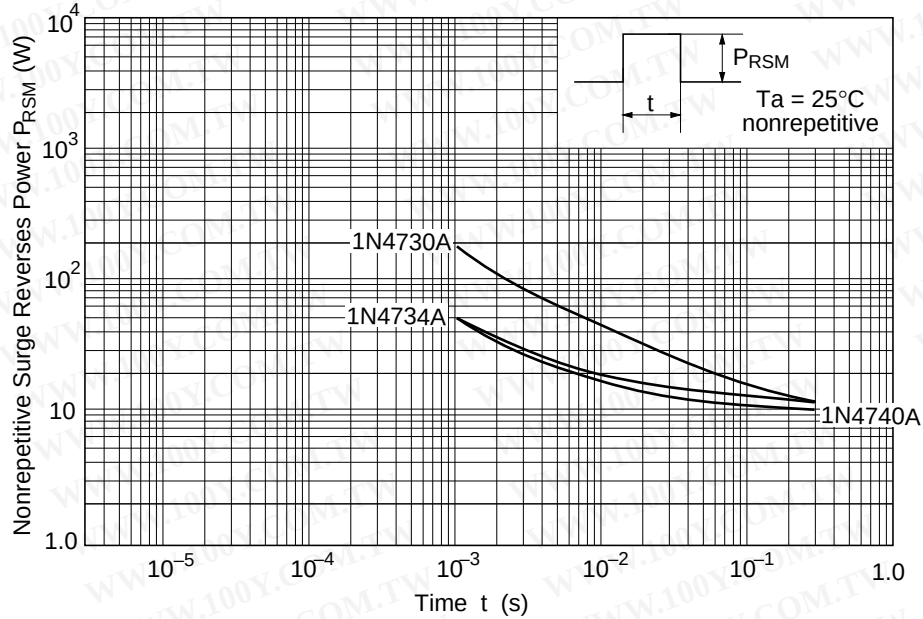


Fig.4 Surge Reverse Power Ratings

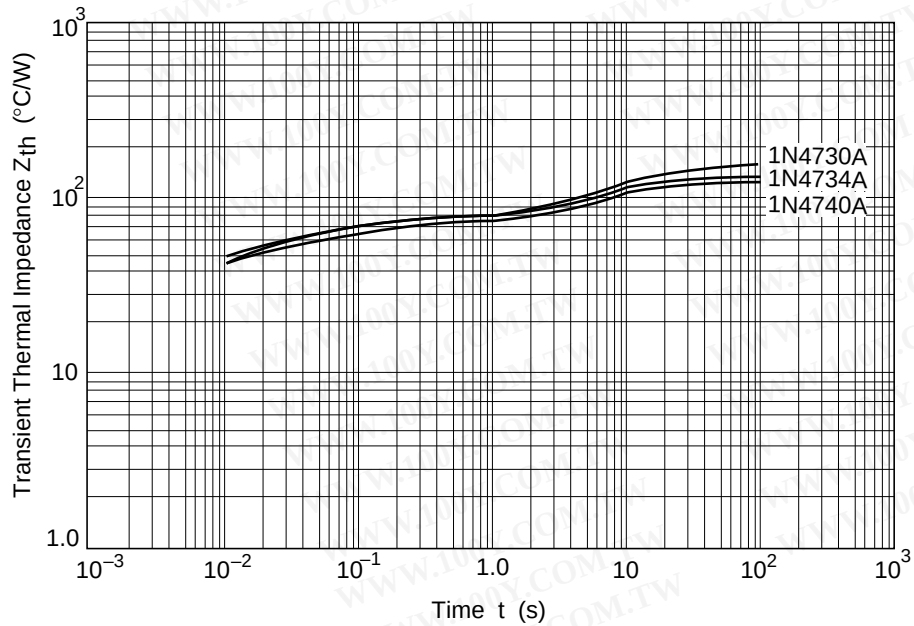


Fig.5 Transient Thermal Impedance