
1N4728A through 1N4753A

Silicon Epitaxial Planar Zener Diodes for Stabilized Power Supply

HITACHI

ADE-208-136 (Z)
Preliminary, Rev. 0
Aug. 1993

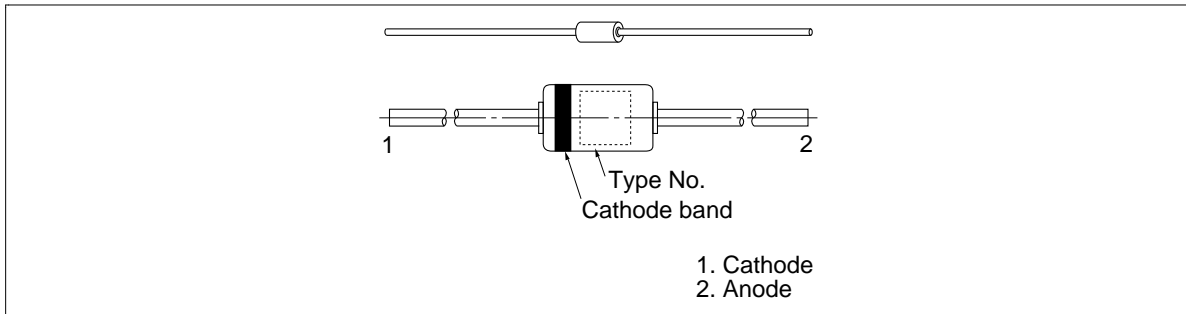
Features

- 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



Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Power dissipation	Pd	1.0	W
Surge power dissipation	Pd(surge)	12	W
Junction temperature	Tj	175	°C
Storage temperature	Tstg	-55 to +175	°C

Note: P_w = 10ms

1N4728A through 1N4753A

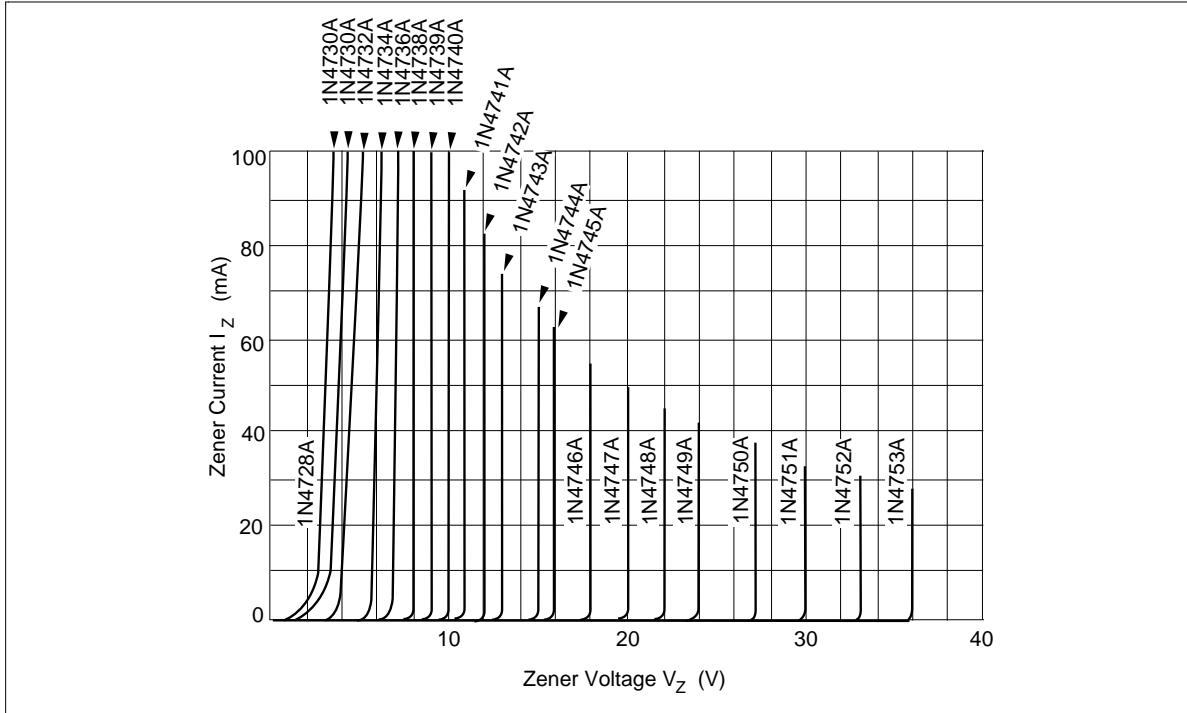
Electrical Characteristics (Ta = 25°C)

	V _z (V)*	I _R (μA)		Z _{ZT} (Ω)		Z _{ZK} (Ω)	
		Test Condition	Max	Test Condition	Max	Test Condition	Max
		I _z (mA)	V _R (V)	I _{ZT} (mA)	I _{ZK} (mA)		
1N4728A	3.3 ± 5 (%)	76	1.0	76	1.0	400	1.0
1N4729A	3.6 ± 5 (%)	69	1.0	69	1.0	400	1.0
1N4730A	3.9 ± 5 (%)	64	1.0	64	1.0	400	1.0
1N4731A	4.3 ± 5 (%)	58	1.0	58	1.0	400	1.0
1N4732A	4.7 ± 5 (%)	53	1.0	53	1.0	500	1.0
1N4733A	5.1 ± 5 (%)	49	1.0	49	1.0	550	1.0
1N4734A	5.6 ± 5 (%)	45	2.0	45	2.0	600	1.0
1N4735A	6.2 ± 5 (%)	41	3.0	41	3.0	700	1.0
1N4736A	6.8 ± 5 (%)	37	4.0	37	4.0	700	1.0
1N4737A	7.5 ± 5 (%)	34	5.0	34	5.0	700	0.5
1N4738A	8.2 ± 5 (%)	31	6.0	31	6.0	700	0.5
1N4739A	9.1 ± 5 (%)	28	7.0	28	7.0	700	0.5
1N4740A	10 ± 5 (%)	25	7.6	25	7.6	700	0.25
1N4741A	11 ± 5 (%)	23	8.4	23	8.4	700	0.25
1N4742A	12 ± 5 (%)	21	9.1	21	9.1	700	0.25
1N4743A	13 ± 5 (%)	19	9.9	19	9.9	700	0.25
1N4744A	15 ± 5 (%)	17	11.4	17	11.4	700	0.25
1N4745A	16 ± 5 (%)	15.5	12.2	15.5	12.2	700	0.25
1N4746A	18 ± 5 (%)	14.0	13.7	14.0	13.7	750	0.25
1N4747A	20 ± 5 (%)	12.5	15.2	12.5	15.2	750	0.25
1N4748A	22 ± 5 (%)	11.5	16.7	11.5	16.7	750	0.25
1N4749A	24 ± 5 (%)	10.5	18.2	10.5	18.2	750	0.25
1N4750A	27 ± 5 (%)	9.5	20.6	9.5	20.6	750	0.25
1N4751A	30 ± 5 (%)	8.5	22.8	8.5	22.8	1000	0.25
1N4752A	33 ± 5 (%)	7.5	25.1	7.5	25.1	1000	0.25
1N4753A	36 ± 5 (%)	7.0	27.4	7.0	27.4	1000	0.25

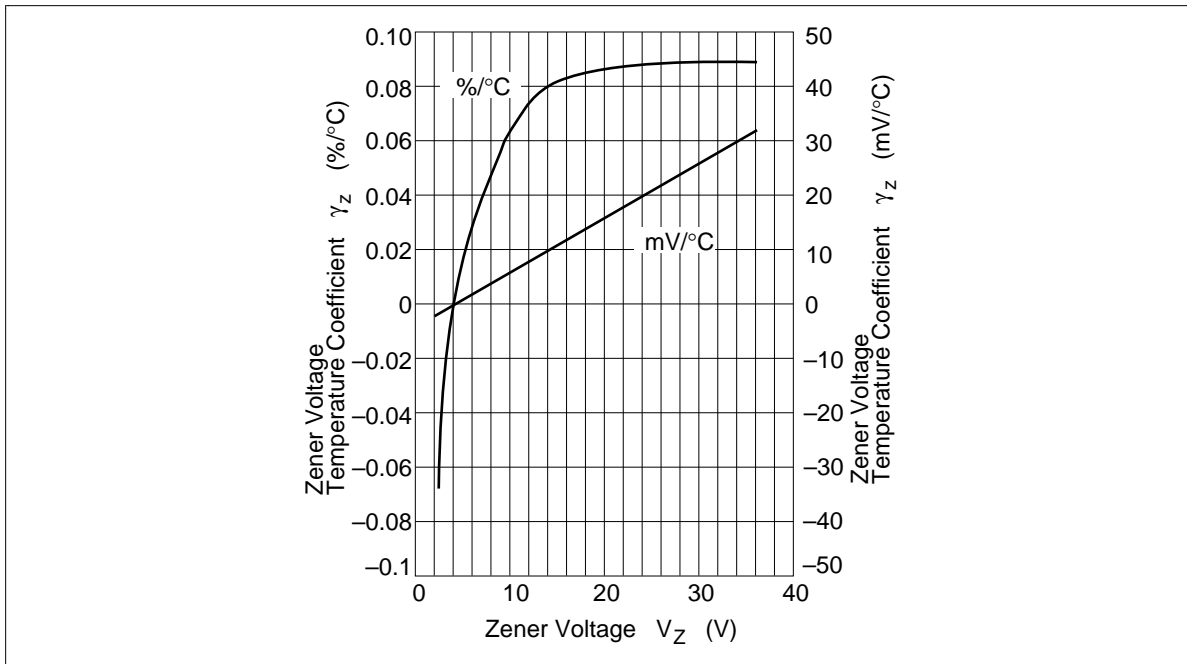
Note: Tested with DC.

1N4728A through 1N4753A

Zener current Vs. Zener voltage

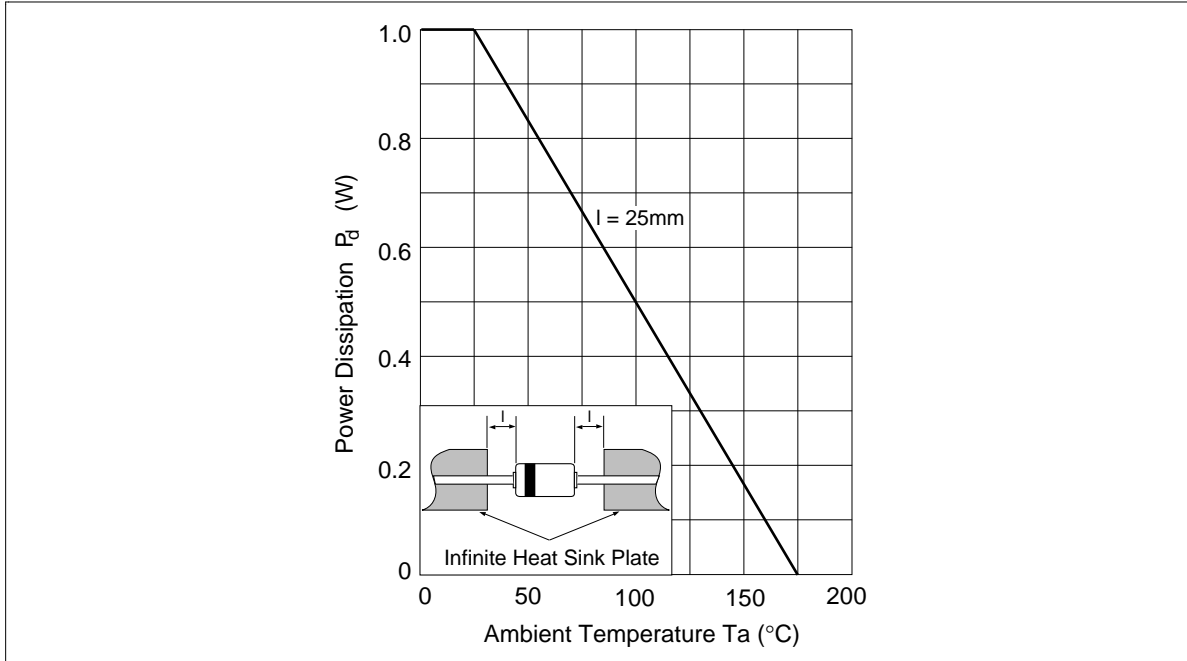


Temperature Coefficient Vs. Zener voltage

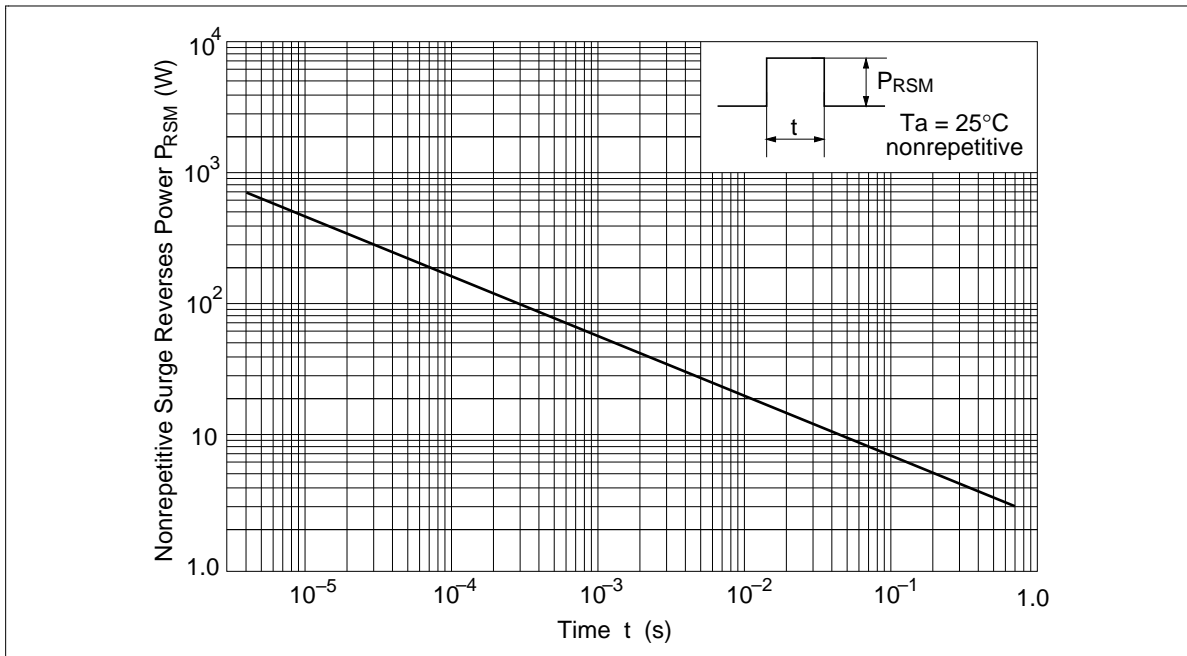


1N4728A through 1N4753A

Power Dissipation Vs. Ambient Temperature

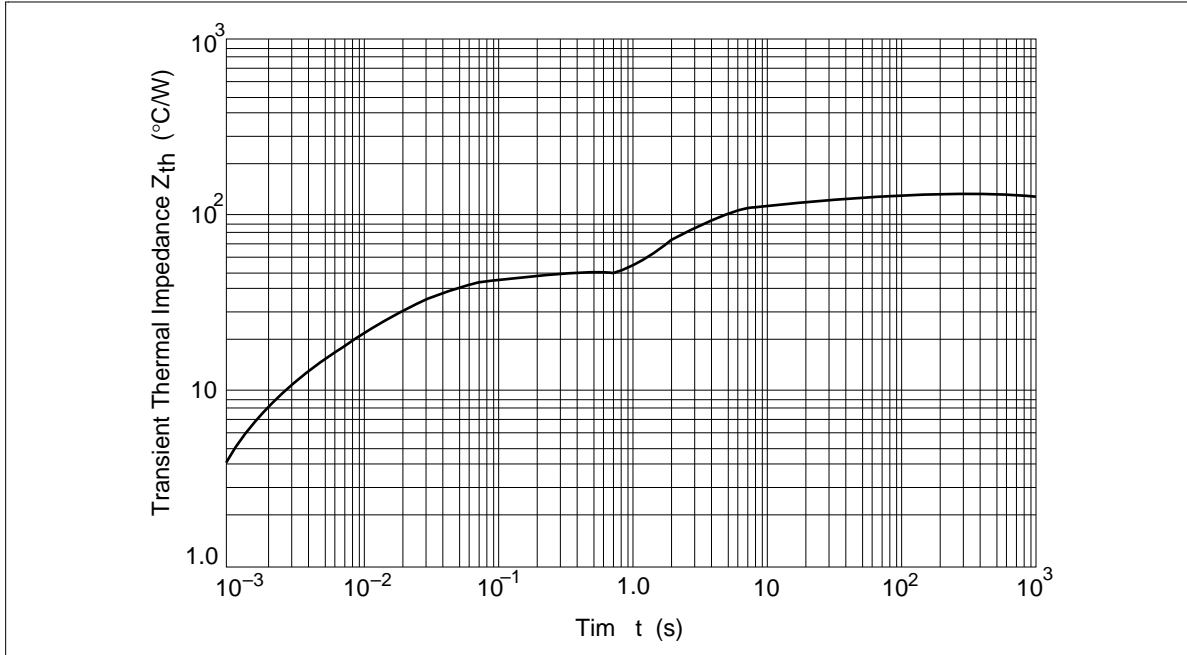


Surge Reverse Power Ratings



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Transient Thermal Impedance



Package Dimensions

