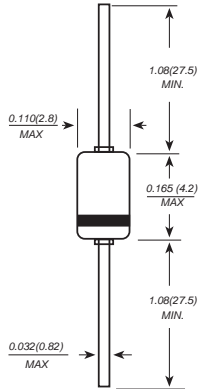


# 1N4728A THRU 1N4764A

## DO-41 Glass Zener Diode

*Zener Voltage: 3.3-100V Peak Pulse Power: 1000mW*

### DO-41(GLASS)



Dimensions in inches and (millimeters)

### FEATURE

- ◆ Low zener impedance
- ◆ Low reverse leakage
- ◆ Power dissipation of 1000mW
- ◆ High stability and high reliability

### MECHANICAL DATA

**Case:** DO-41 Glass Case

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

**Maximum Ratings & Thermal Characteristics** (Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Power Dissipation	Pd	1000 <sup>1)</sup>	mW
Operating junction temperature	Tj	200	°C
Storage temperature range	Ts	-55-+200	°C

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

## ELECTRICAL CHARACTERISTICS (at TA=25°C unless otherwise noted)

TYPE*	Zener Voltage		Reverse Current		Dynamic Resistance	
	Vz(V)	Test Condition	Ir(μA)	Test Condition	rd(Ω)	Test Condition
	Nom.	Iz(mA)	Max.	Vr(V)	Max.	Iz(mA)
1N4728A	3.3	76.0	100	1.0	10	76.0
1N4729A	3.6	69.0	100	1.0	10	69.0
1N4730A	3.9	64.0	50	1.0	9	64.0
1N4731A	4.3	58.0	10	1.0	9	58.0
1N4732A	4.7	53.0	10	1.0	8	53.0
1N4733A	5.1	49.0	10	1.0	7	49.0
1N4734A	5.6	45.0	10	2.0	5	45.0
1N4735A	6.2	41.0	10	3.0	2	41.0
1N4736A	6.8	37.0	10	4.0	3.5	37.0
1N4737A	7.5	34.0	10	5.0	4	34.0
1N4738A	8.2	31.0	10	6.0	4.5	31.0
1N4739A	9.1	28.0	10	7.0	5	28.0
1N4740A	10	25.0	10	7.6	7	25.0
1N4741A	11	23.0	5	8.4	8	23.0
1N4742A	12	21.0	5	9.1	9	21.0
1N4743A	13	19.0	5	9.9	10	19.0
1N4744A	15	17.0	5	11.4	14	17.0
1N4745A	16	15.5	5	12.2	16	15.5
1N4746A	18	14.0	5	13.7	20	14.0
1N4747A	20	12.5	5	15.2	22	12.5
1N4748A	22	11.5	5	16.7	23	11.5
1N4749A	24	10.5	5	18.2	25	10.5
1N4750A	27	9.5	5	20.6	35	9.5
1N4751A	30	8.5	5	22.8	40	8.5
1N4752A	33	7.5	5	25.1	45	7.5
1N4753A	36	7.0	5	27.4	50	7.0
1N4754A	39	6.5	5	29.7	60	6.5
1N4755A	43	6.0	5	32.7	70	6.0
1N4756A	47	5.5	5	35.8	80	5.5
1N4757A	51	5.0	5	38.8	95	5.0
1N4758A	56	4.5	5	42.6	110	4.5
1N4759A	62	4.0	5	47.1	125	4.0
1N4760A	68	3.7	5	51.7	150	3.7
1N4761A	75	3.3	5	56.0	175	3.3
1N4762A	82	3.0	5	62.2	200	3.0
1N4763A	91	2.8	5	69.2	250	2.8
1N4764A	100	2.5	5	76.0	350	2.5

### Notes:

- 1) Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.
- 2) Measured under thermal equilibrium and DC test conditions.
- 3) The rating listed in the electrical characteristics table is maximum peak, non-repetitive, reverse surge current of 1/2 square wave or equivalent sine wave pulse of 1/120 second duration superimposed on the test current, IZT, per JEDEC registration; however, actual device capability is as described in Figure 5 of the General Data-DO-41 Glass.
- 4) Tested with pulses tp = 20 ms.
- 5) VF(Max)=1.20V@ IF=200mA

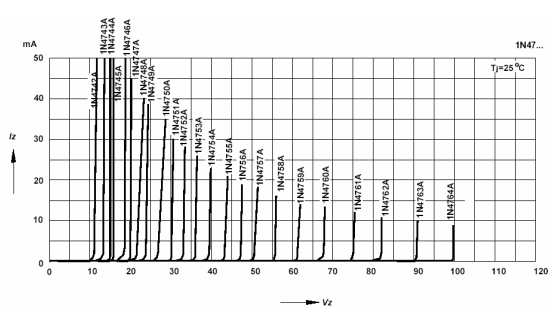
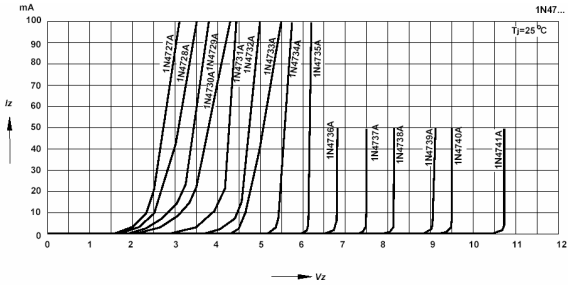
\*Measure under thermal equilibrium and DC current test conditions(TA=25°C)

Tolerance on nominal Vz value: ±5%.

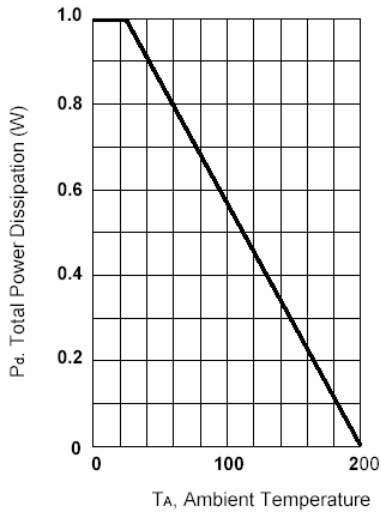
Tight tolerances on preferred voltages: 1N47...C: ±2%;  
1N47...D: ±1%.

# RATINGS AND CHARACTERISTIC CURVES 1N4728A THRU 1N4764A

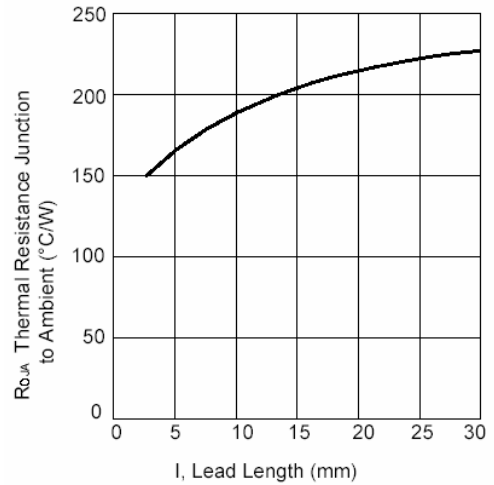
## Breakdown characteristics $T_J = \text{constant}$ (pulsed)



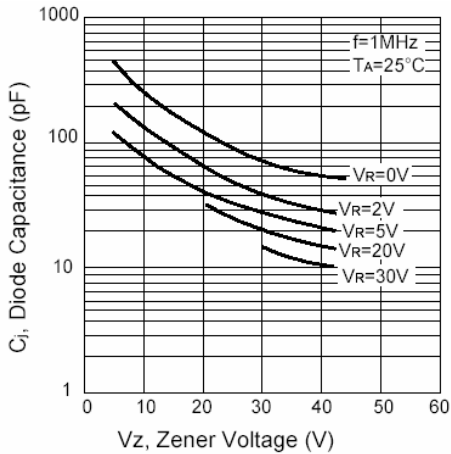
## Power Dissipation vs Ambient Temperature



## Typical Thermal Resistance vs. Lead Length



## Junction Capacitance vs Zener Voltage



## Typical Zener Impedance vs. Zener Voltage

