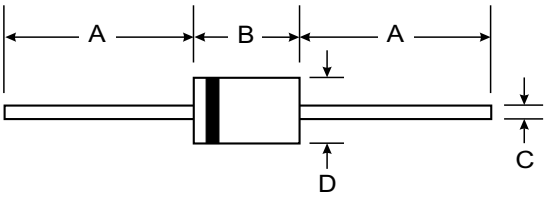
1N4728A - 1N4764A

1.0W ZENER DIODE

Features

- 1.0 Watt Power Dissipation
- 3.3V - 100V Nominal Zener Voltage
- Standard V_Z Tolerance is 5%



Mechanical Data

- Case: DO-41, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Marking: Type Number
- Approx. Weight: 0.35 grams

DO-41 Glass		
Dim	**Min**	**Max**
A	25.40	—
B	—	4.70
C	—	0.863
D	—	2.71
All Dimensions in mm		

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Zener Current (see Table page 2)	I_Z	Pd / V_Z	mA
Power Dissipation Derate Above 50°C (Note 1)	P_d	1.0 6.67	W mW/°C
Thermal Resistance - Junction to Ambient Air	$R_{\theta JA}$	175	°C/W
Forward Voltage @ I_F = 200 mA	V_F	1.2	V
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to + 200	°C

Note: 1. Valid provided that leads are kept at $T_L \leq 50°C$ with lead length = 9.5mm (3/8") from case.

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Type Number	Nominal Zener Voltage (Note 2)	Test Current	Maximum Zener Impedance (Note 3)			Maximum Reverse Leakage Current		Max Surge Current 8.3ms
	V_Z @ I_{ZT}	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}	I_{ZK}	I_R	@ V_R	I_{ZS}
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)
1N4728A	3.3	76	10	400	1.0	100	1.0	1380
1N4729A	3.6	69	10	400	1.0	100	1.0	1260
1N4730A	3.9	64	9.0	400	1.0	50	1.0	1190
1N4731A	4.3	58	9.0	400	1.0	10	1.0	1070
1N4732A	4.7	53	8.0	500	1.0	10	1.0	970
1N4733A	5.1	49	7.0	550	1.0	10	1.0	890
1N4734A	5.6	45	5.0	600	1.0	10	2.0	810
1N4735A	6.2	41	2.0	700	1.0	10	3.0	730
1N4736A	6.8	37	3.5	700	1.0	10	4.0	660
1N4737A	7.5	34	4.0	700	0.5	10	5.0	605
1N4738A	8.2	31	4.5	700	0.5	10	6.0	550
1N4739A	9.1	28	5.0	700	0.5	10	7.0	500
1N4740A	10	25	7.0	700	0.25	10	7.6	454
1N4741A	11	23	8.0	700	0.25	5.0	8.4	414
1N4742A	12	21	9.0	700	0.25	5.0	9.1	380
1N4743A	13	19	10	700	0.25	5.0	9.9	344
1N4744A	15	17	14	700	0.25	5.0	11.4	304
1N4745A	16	15.5	16	700	0.25	5.0	12.2	285
1N4746A	18	14	20	750	0.25	5.0	13.7	250
1N4747A	20	12.5	22	750	0.25	5.0	15.2	225
1N4748A	22	11.5	23	750	0.25	5.0	16.7	205
1N4749A	24	10.5	25	750	0.25	5.0	18.2	190
1N4750A	27	9.5	35	750	0.25	5.0	20.6	170
1N4751A	30	8.5	40	1000	0.25	5.0	22.8	150
1N4752A	33	7.5	45	1000	0.25	5.0	25.1	135
1N4753A	36	7.0	50	1000	0.25	5.0	27.4	125
1N4754A	39	6.5	60	1000	0.25	5.0	29.7	115
1N4755A	43	6.0	70	1500	0.25	5.0	32.7	110
1N4756A	47	5.5	80	1500	0.25	5.0	35.8	95
1N4757A	51	5.0	95	1500	0.25	5.0	38.8	90
1N4758A	56	4.5	110	2000	0.25	5.0	42.6	80
1N4759A	62	4.0	125	2000	0.25	5.0	47.1	70
1N4760A	68	3.7	150	2000	0.25	5.0	51.7	65
1N4761A	75	3.3	175	2000	0.25	5.0	56.0	60
1N4762A	82	3.0	200	3000	0.25	5.0	62.2	55
1N4763A	91	2.8	250	3000	0.25	5.0	69.2	50
1N4764A	100	2.5	350	3000	0.25	5.0	76.0	45

Notes: 2. Measured under thermal equilibrium and dc (I_{ZT}) test conditions.
3. The Zener impedance is derived from the 60 Hz ac voltage which results when an ac current having an rms value equal to 10% of the Zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK}. Zener impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.

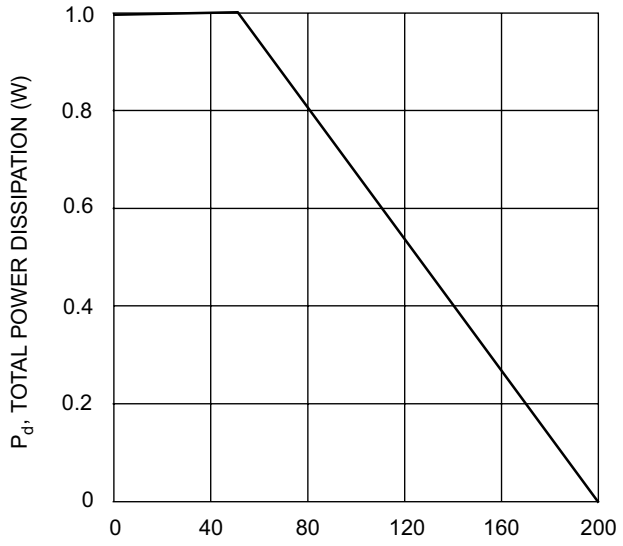


Fig.1 Power Dissipation vs Ambient Temperature