1N4728A THRU 1N4758A

ZENER DIODES

REVERSE VOLTAGE: **3.3 TO 56 VOLTS**

POWER DISSIPATION: **1.0 WATTS**

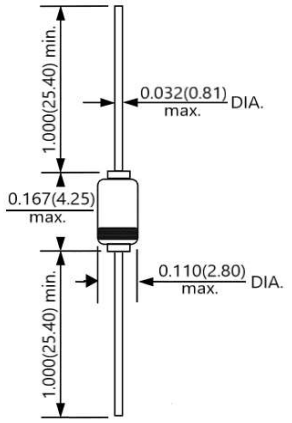
FEATURES

· Zener Voltage Range 3.3 to 56 Volts
· Hermetically Sealed Glass
· All External Surfaces Are Corrosion Resistant And Terminals Are Readily Solderable
· Cathode Indicated By Polarity Band

MECHANICAL DATA

Case : Molded glass DO-41G
Mounting Position : Any

DO-41G



Dimensions in inchs and (millimeters)

Maximum Ratings @ 25 °C Unless Otherwise Specified

Parameter	Symbol	Value	Unit
Power Dissipation	P_{tot}	1.0	W
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	100	℃/W
Junction Temperature	T_J	175	℃
Storage Temperature Range	T_{stg}	-65 to +175	℃

Parameter	Symbol	Value	Unit
Forward Voltage at I_F = 200 mA	V_F	1.2	V

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Electrical Characteristics

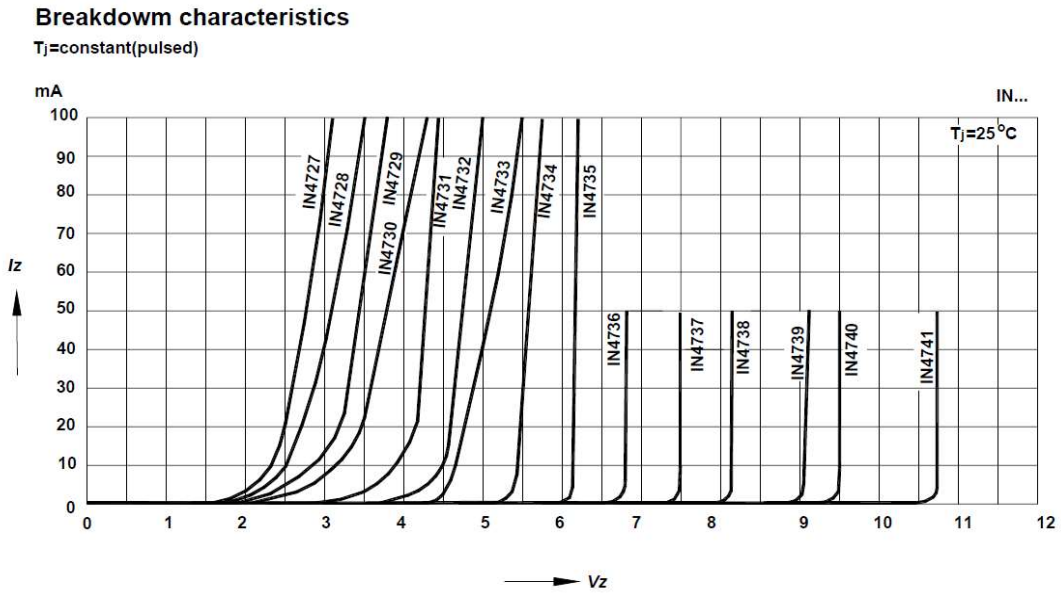
Tamb = 25 °C, unless otherwise specified

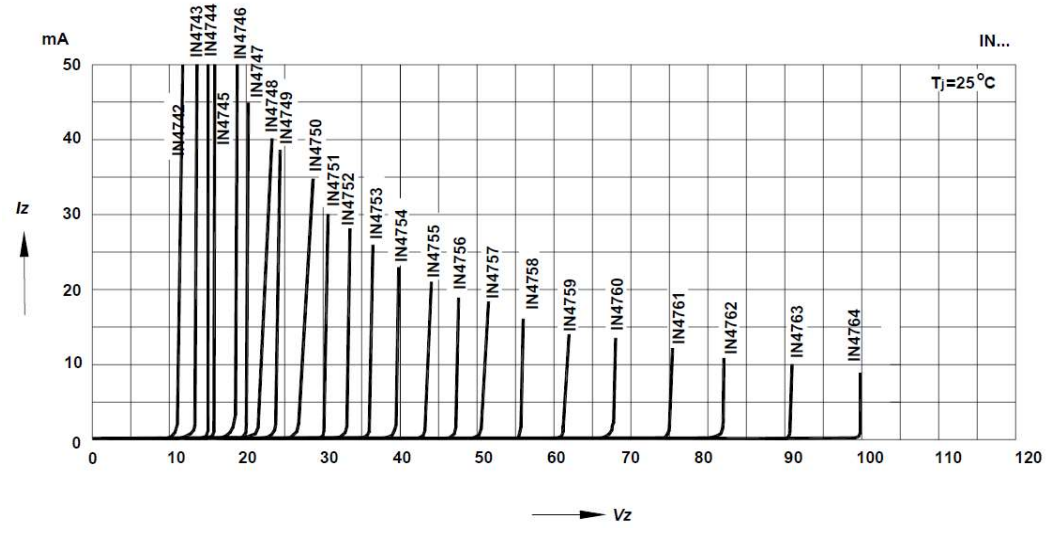
Type	V_Z[1] @ I_{ZT} NORMAL ZENER VOLTAGE	I_{ZT}	Z_{ZT} @ I_{ZT} MAX.	I_{ZK}	Z_{ZK}[2] @ I_{ZK} MAX.	I_R @ V_R MAX.	V_R
	V	mA	Ω	mA	Ω	µA	V
1N4728A	3.3	76	10	1	400	150	1.0
1N4729A	3.6	69	10	1	400	100	1.0
1N4730A	3.9	64	9.0	1	400	100	1.0
1N4731A	4.3	58	9.0	1	400	50	1.0
1N4732A	4.7	53	8.0	1	500	10	1.0
1N4733A	5.1	49	7.0	1	550	10	1.0
1N4734A	5.6	45	5.0	1	600	10	2.0
1N4735A	6.2	41	2.0	1	700	10	3.0
1N4736A	6.8	37	3.5	1	700	10	4.0
1N4737A	7.5	34	4.0	0.5	700	10	5.0
1N4738A	8.2	31	4.5	0.5	700	10	6.0
1N4739A	9.1	28	5.0	0.5	700	10	7.0
1N4740A	10.0	25	7.0	0.25	700	10	7.6
1N4741A	11.0	23	8.0	0.25	700	5	8.4
1N4742A	12.0	21	9.0	0.25	700	5	9.1
1N4743A	13.0	19	10	0.25	700	5	9.9
1N4744A	15.0	17	14	0.25	700	5	11.4
1N4745A	16.0	15.5	16	0.25	700	5	12.2
1N4746A	18.0	14.0	20	0.25	750	5	13.7
1N4747A	20.0	12.5	22	0.25	750	5	15.2
1N4748A	22.0	11.5	23	0.25	750	5	16.7
1N4749A	24.0	10.5	25	0.25	750	5	18.2
1N4750A	27.0	9.5	35	0.25	750	5	20.6
1N4751A	30.0	8.5	40	0.25	1000	5	22.8
1N4752A	33.0	7.5	45	0.25	1000	5	25.1
1N4753A	36.0	7.0	50	0.25	1000	5	27.4
1N4754A	39.0	6.5	60	0.25	1000	5	29.7
1N4755A	43.0	6.0	70	0.25	1500	5	32.7
1N4756A	47.0	5.5	80	0.25	1500	5	35.8
1N4757A	51.0	5.0	95	0.25	1500	5	38.8
1N4758A	56.0	4.5	110	0.25	2000	5	42.6

NOTES:

1. Tested with pulses tp = 20 ms.
2. The dynamic resistance 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}. Dynamic resistance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate unstable units.

Typical Characteristics





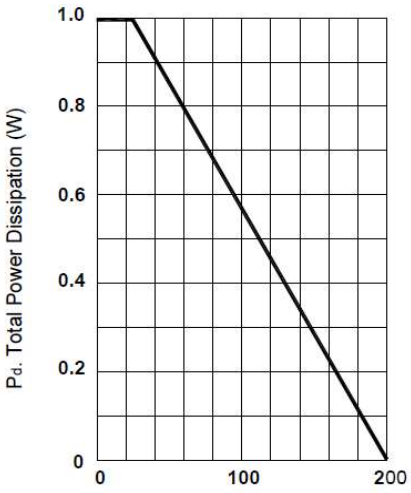


Fig. 1 Power Dissipation vs Ambient Temperature

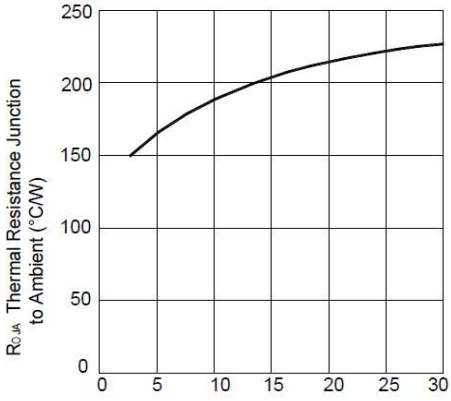


Fig. 2 Typical Thermal Resistance vs. Lead Length

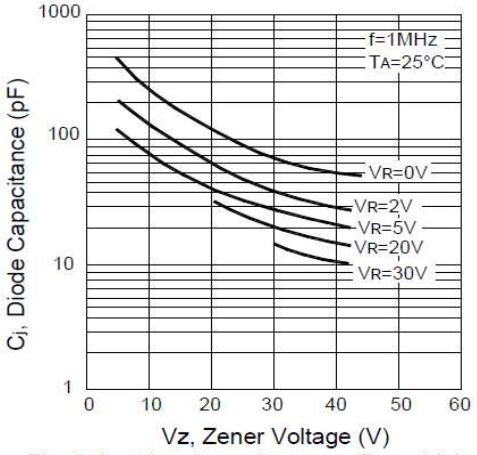


Fig. 3 Junction Capacitance vs Zener Voltage

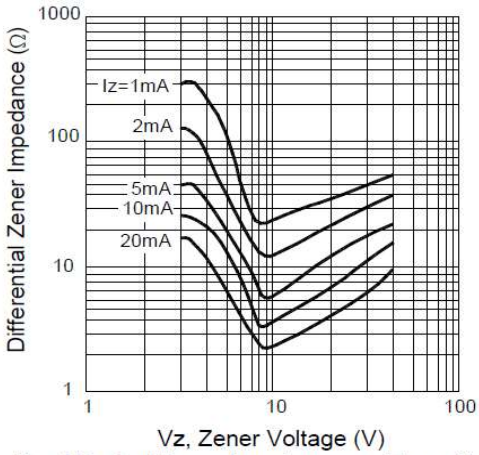


Fig. 4 Typical Zener Impedance vs. Zener Voltage