

ZM47 xxA Series

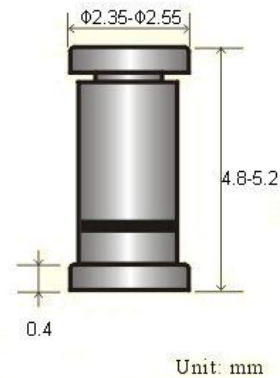
Features

- Low Reverse Leakage
- Low Zener Impedance
- 1000mW; Power Dissipation of 1000mW
- High Stability and High Reliability

Mechanical Data

- Case: LL-41 Glass Case
- Polarity: Color band denotes cathode end
- Mounting Position: Any

LL-41GLASS



Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Power Dissipation	Pd	1000 ¹⁾	mW
Operating junction temperature	Tj	175	°C
Storage temperature range	Ts	-65-+150	°C

1) Valid provided that electrodes are kept at ambient temperature.

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

TYPE	Zener Voltage				Reverse Current		Dynamic Resistance	
	Vz(V)			Test Condition	Ir(uA)	Test Condition	rd(Ω)	Test Condition
	Min.	Nom.	Max.	Iz(mA)	Max.	Vr(V)	Max.	Iz(mA)
ZM 4728A	3.23	3.3	3.37	76.0	100	1.0	10	76.0
ZM 4729A	3.53	3.6	3.67	69.0	100	1.0	10	69.0
ZM 4730A	3.82	3.9	3.98	64.0	50	1.0	9	64.0
ZM 4731A	4.21	4.3	4.39	58.0	10	1.0	9	58.0
ZM 4732A	4.61	4.7	4.79	53.0	10	1.0	8	53.0
ZM 4733A	5.00	5.1	5.20	49.0	10	1.0	7	49.0
ZM 4734A	5.49	5.6	5.71	45.0	10	2.0	5	45.0
ZM 4735A	6.08	6.2	6.32	41.0	10	3.0	2	41.0
ZM 4736A	6.66	6.8	6.94	37.0	10	4.0	3.5	37.0
ZM 4737A	7.35	7.5	7.65	34.0	10	5.0	4	34.0
ZM 4738A	8.04	8.2	8.36	31.0	10	6.0	4.5	31.0
ZM 4739A	8.92	9.1	9.28	28.0	10	7.0	5	28.0
ZM 4740A	9.80	10	10.20	25.0	10	7.6	7	25.0
ZM 4741A	10.78	11	11.22	23.0	5	8.4	8	23.0
ZM 4742A	11.76	12	12.24	21.0	5	9.1	9	21.0

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	Vz(V)			Test Condition	Ir(uA)	Test Condition	rd(Ω)	Test Condition
	Min.	Nom.	Max.	Iz(mA)	Max.	Vr(V)	Max.	Iz(mA)
ZM 4743A	12.74	13	13.26	19.0	5	9.9	10	19.0
ZM 4744A	14.70	15	15.30	17.0	5	11.4	14	17.0
ZM 4745A	15.68	16	16.32	15.5	5	12.2	16	15.5
ZM 4746A	17.64	18	18.36	14.0	5	13.7	20	14.0
ZM 4747A	19.60	20	20.40	12.5	5	15.2	22	12.5
ZM 4748A	21.56	22	22.44	11.5	5	16.7	23	11.5
ZM 4749A	23.52	24	24.48	10.5	5	18.2	25	10.5
ZM 4750A	26.46	27	27.54	9.5	5	20.6	35	9.5
ZM 4751A	29.40	30	30.60	8.5	5	22.8	40	8.5
ZM 4752A	32.34	33	33.66	7.5	5	25.1	45	7.5
ZM 4753A	35.28	36	36.72	7.0	5	27.4	50	7.0
ZM 4754A	38.22	39	39.78	6.5	5	29.7	60	6.5
ZM 4755A	42.14	43	43.86	6.0	5	32.7	70	6.0
ZM 4756A	46.06	47	48.02	5.5	5	35.8	80	5.5
ZM 4757A	49.98	51	52.02	5.0	5	38.8	95	5.0
ZM 4758A	54.88	56	57.12	4.5	5	42.6	110	4.5
ZM 4759A	60.76	62	63.24	4.0	5	47.1	125	4.0
ZM 4760A	66.64	68	69.36	3.7	5	51.7	150	3.7
ZM 4761A	73.50	75	76.50	3.3	5	56.0	175	3.3
ZM 4762A	80.36	82	86.64	3.0	5	62.2	200	3.0
ZM 4763A	91.98	91	92.82	2.8	5	69.2	250	2.8
ZM 4764A	98.00	100	102	2.5	5	76.0	350	2.5

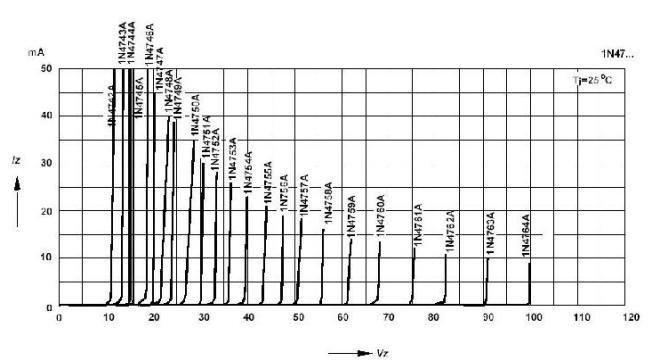
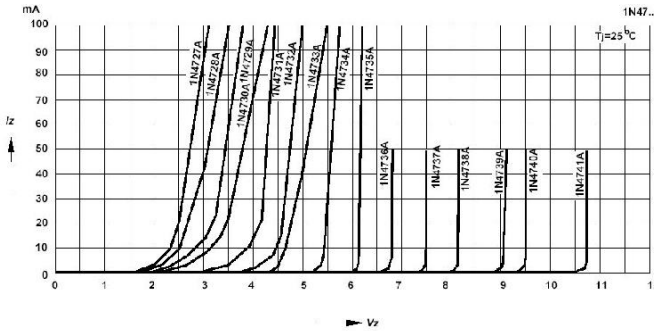
Notes:

- 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 equiv-alent 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 Fiure 5 of the General Data-DO-41 Glass.
- 4) Tested with pulses tp = 20 ms.
- 5) VF(Max)=1.20V@ IF=200mA

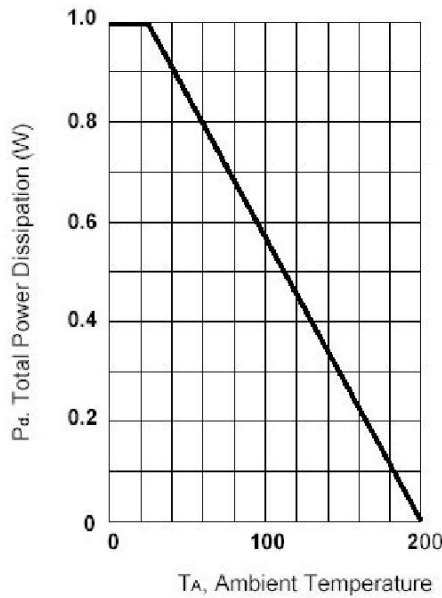
*Measure under thermal equilibrium and DC current test conditions(TA=25°C).

These diodes are also available in DO-41 case with the type designation 1N4728...1N4764

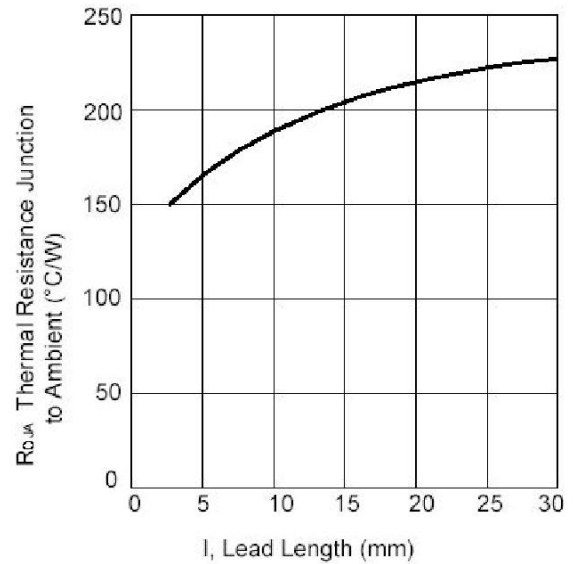
Breakdown characteristics $T_j = \text{constant}$ (pulsed)



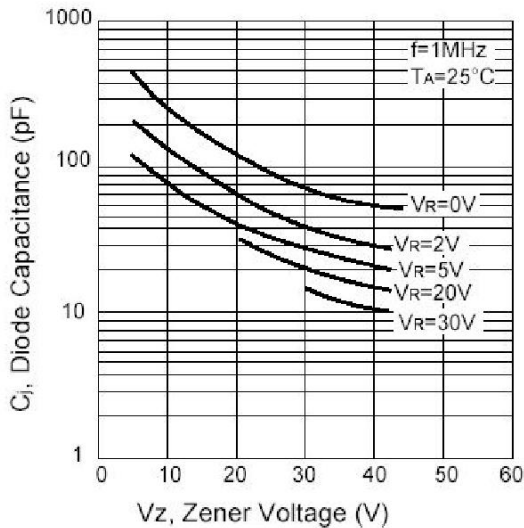
Power Dissipation vs Ambient Temperature



Typical Thermal Resistance vs. Lead Length



Junction Capacitance vs Zener Voltage



Typical Zener Impedance vs. Zener Voltage

