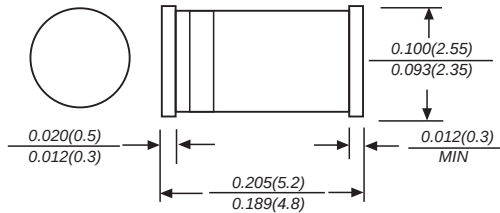


DL47-SERIES

LL-41 (Melf)Glass Zener Diode

Zener Voltage:3.3-100V Peak Pulse Power:1.0W

LL-41 GLASS



Dimensions in inches and (millimeters)

FEATURE

- ◆ Low Reverse Leakage
- ◆ Low Zener Impedance
- ◆ 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

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 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 (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)
DL 4728A	3.3	76.0	100	1.0	10	76.0
DL 4729A	3.6	69.0	100	1.0	10	69.0
DL 4730A	3.9	64.0	50	1.0	9	64.0
DL 4731A	4.3	58.0	10	1.0	9	58.0
DL 4732A	4.7	53.0	10	1.0	8	53.0
DL 4733A	5.1	49.0	10	1.0	7	49.0
DL 4734A	5.6	45.0	10	2.0	5	45.0
DL 4735A	6.2	41.0	10	3.0	2	41.0
DL 4736A	6.8	37.0	10	4.0	3.5	37.0
DL 4737A	7.5	34.0	10	5.0	4	34.0
DL 4738A	8.2	31.0	10	6.0	4.5	31.0
DL 4739A	9.1	28.0	10	7.0	5	28.0
DL 4740A	10	25.0	10	7.6	7	25.0
DL 4741A	11	23.0	5	8.4	8	23.0
DL 4742A	12	21.0	5	9.1	9	21.0
DL 4743A	13	19.0	5	9.9	10	19.0
DL 4744A	15	17.0	5	11.4	14	17.0
DL 4745A	16	15.5	5	12.2	16	15.5
DL 4746A	18	14.0	5	13.7	20	14.0
DL 4747A	20	12.5	5	15.2	22	12.5
DL 4748A	22	11.5	5	16.7	23	11.5
DL 4749A	24	10.5	5	18.2	25	10.5
DL 4750A	27	9.5	5	20.6	35	9.5
DL 4751A	30	8.5	5	22.8	40	8.5
DL 4752A	33	7.5	5	25.1	45	7.5
DL 4753A	36	7.0	5	27.4	50	7.0
DL 4754A	39	6.5	5	29.7	60	6.5
DL 4755A	43	6.0	5	32.7	70	6.0
DL 4756A	47	5.5	5	35.8	80	5.5
DL 4757A	51	5.0	5	38.8	95	5.0
DL 4758A	56	4.5	5	42.6	110	4.5
DL 4759A	62	4.0	5	47.1	125	4.0
DL 4760A	68	3.7	5	51.7	150	3.7
DL 4761A	75	3.3	5	56.0	175	3.3
DL 4762A	82	3.0	5	62.2	200	3.0
DL 4763A	91	2.8	5	69.2	250	2.8
DL 4764A	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:

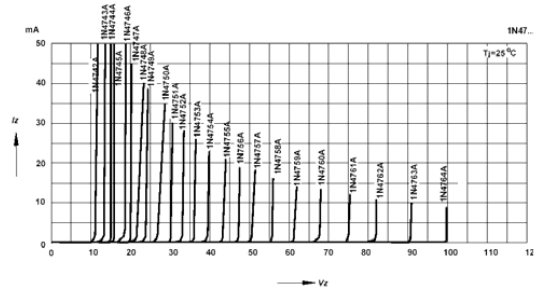
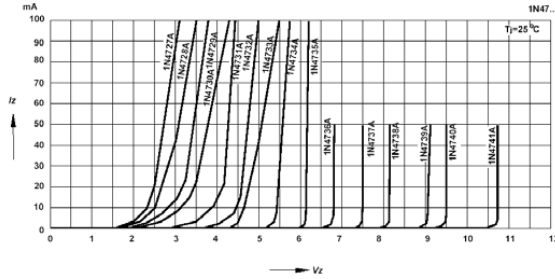
DL47...C: ±2%;

D L47...D: ±1%.

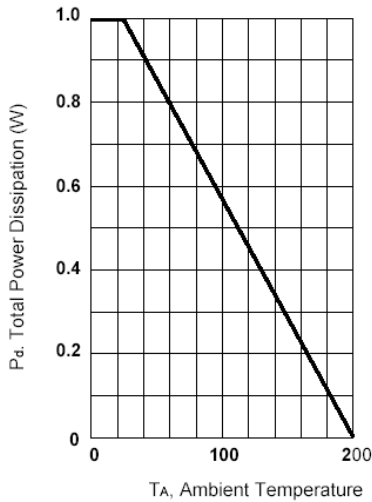
These diodes are also available in DO-41 case with the type designation 1N4728...1N4764

RATINGS AND CHARACTERISTIC CURVES DL47 SERIES

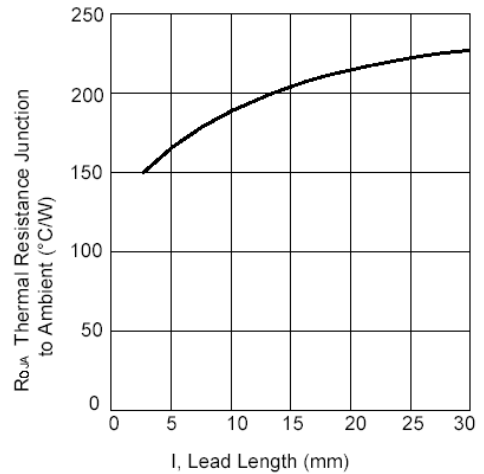
Breakdown characteristics $T_j = \text{constant}$ (pulsed)



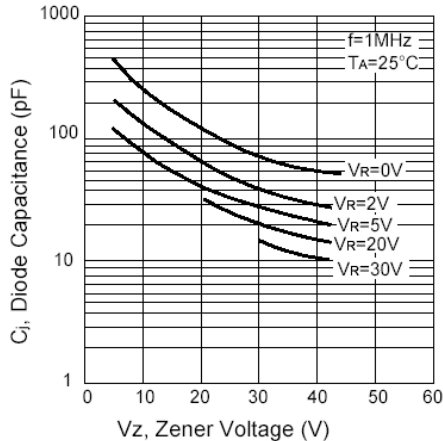
Power Dissipation vs Ambient Temperature



Typical Thermal Resistance vs. Lead Length



Junction Capacitance vs Zener Voltage



Typical Zener Impedance vs. Zener Voltage

