

ZENER DIODE

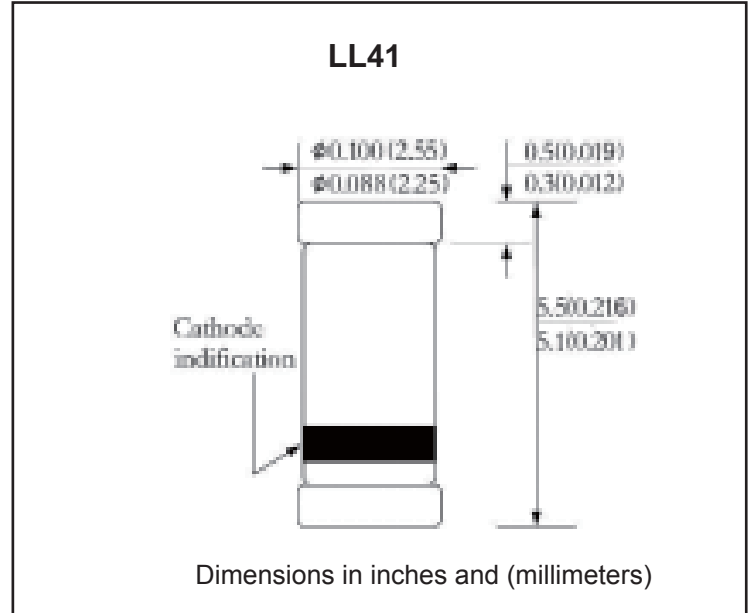
PEAK PULSE POWER:1000mW

FEATURES

- Low Reverse Leakage
- Low Zener Impedance
- High Stability and High Reliability

MECHANICAL DATA

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



MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

Parameters	SYMBOLS	VALUE	UNITS
Power Dissipation	P_D	1000	mW
Operating junction temperature	T_J	175	°C
Storage temperature range	T_{STG}	-65 to + 150	°C

Note:1. Valid provided that electrodes are kept at ambient temperature.

Electrical Specification ($T_A=25@25^{\circ}C$ unless otherwise specified)

TYPE	Zener Voltage		Reverse Current		Dynamic Resistance	
	$V_Z(V)$	Test Condition	$I_r(\mu A)$	Test Condition	$r_d(\Omega)$	Test Condition
	Nom.	$I_Z(mA)$	Max.	$V_r(V)$	Max.	$I_Z(mA)$
ZM4728A	3.3	76.0	100	1.0	10	76.0
ZM4729A	3.6	69.0	100	1.0	10	69.0
ZM4730A	3.9	64.0	50	1.0	9	64.0
ZM4731A	4.3	58.0	10	1.0	9	58.0
ZM4732A	4.7	53.0	10	1.0	8	53.0
ZM4733A	5.1	49.0	10	1.0	7	49.0
ZM4734A	5.6	45.0	10	2.0	5	45.0

RATINGS AND CHARACTERISTIC CURVES

Electrical Specification ($T_A=25@25^{\circ}\text{C}$ unless otherwise specified)

TYPE	Zener Voltage		Reverse Current		Dynamic Resistance	
	Vz(V)	Test Condition	Ir(uA)	Test Condition	rd(Ω)	Test Condition
	Nom.	Iz(mA)	Max.	Vr(V)	Max.	Iz(mA)
ZM4735A	6.2	41.0	10	3.0	2	41.0
ZM4736A	6.8	37.0	10	4.0	3.5	37.0
ZM4737A	7.5	34.0	10	5.0	4	34.0
ZM4738A	8.2	31.0	10	6.0	4.5	31.0
ZM4739A	9.1	28.0	10	7.0	5	28.0
ZM4740A	10	25.0	10	7.6	7	25.0
ZM4741A	11	23.0	5	8.4	8	23.0
ZM4742A	12	21.0	5	9.1	9	21.0
ZM4743A	13	19.0	5	9.9	10	19.0
ZM4744A	15	17.0	5	11.4	14	17.0
ZM 4745A	16	15.5	5	12.2	16	15.5
ZM 4746A	18	14.0	5	13.7	20	14.0
ZM 4747A	20	12.5	5	15.2	22	12.5
ZM 4748A	22	11.5	5	16.7	23	11.5
ZM 4749A	24	10.5	5	18.2	25	10.5
ZM 4750A	27	9.5	5	20.6	35	9.5
ZM 4751A	30	8.5	5	22.8	40	8.5
ZM 4752A	33	7.5	5	25.1	45	7.5
ZM 4753A	36	7.0	5	27.4	50	7.0
ZM 4754A	39	6.5	5	29.7	60	6.5
ZM 4755A	43	6.0	5	32.7	70	6.0
ZM 4756A	47	5.5	5	35.8	80	5.5
ZM 4757A	51	5.0	5	38.8	95	5.0
ZM 4758A	56	4.5	5	42.6	110	4.5
ZM 4759A	62	4.0	5	47.1	125	4.0
ZM 4760A	68	3.7	5	51.7	150	3.7
ZM 4761A	75	3.3	5	56.0	175	3.3
ZM 4762A	82	3.0	5	62.2	200	3.0
ZM 4763A	91	2.8	5	69.2	250	2.8
ZM 4764A	100	2.5	5	76.0	350	2.5

RATINGS AND CHARACTERISTIC CURVES

Electrical Specification ($T_A=25@25^{\circ}\text{C}$ unless otherwise specified)

Notes:

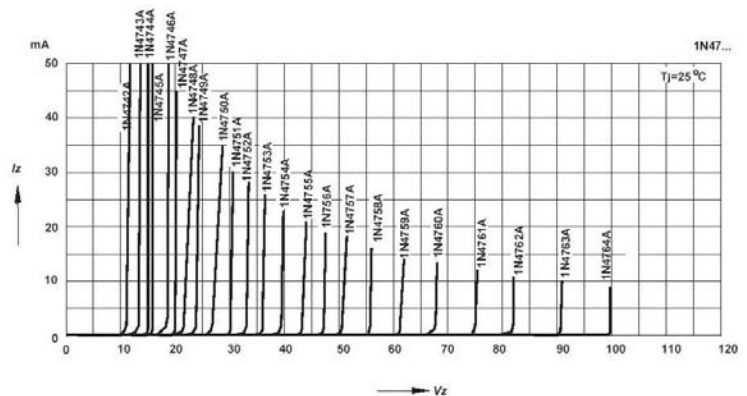
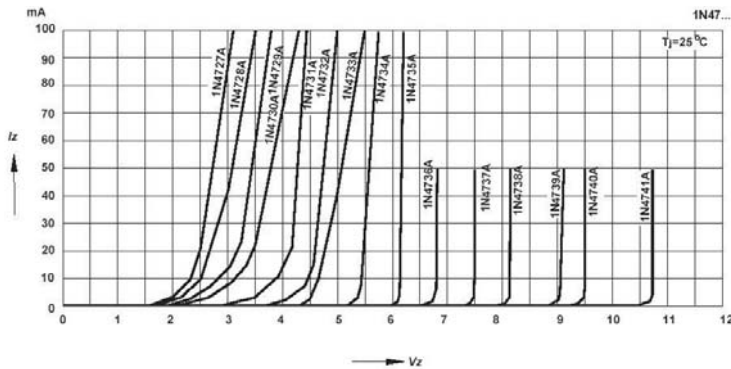
- 1) Valid provided that leads at a distance of 8 mm from case are kept at ambient temperature.
- 2) Measured under thermal equilibrium and DC test conditions.
- 3) The rating listed in the electrical characteristics table is maximum peak, non-repetitive, reverse surge current of 1/2 square wave or equiv-alent 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 Figure 5 of the General Data-DO-41 Glass.
- 4) Tested with pulses $t_p = 20$ ms.
- 5) $V_F(\text{Max})=1.20\text{V}@ I_F=200\text{mA}$

*Measure under thermal equilibrium and DC current test conditions($T_A=25^{\circ}\text{C}$) Tolerance on nominal V_z value: $\pm 5\%$.

Tight tolerances on preferred voltages: ZM47...C: $\pm 2\%$; ZM47...D: $\pm 1\%$.

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

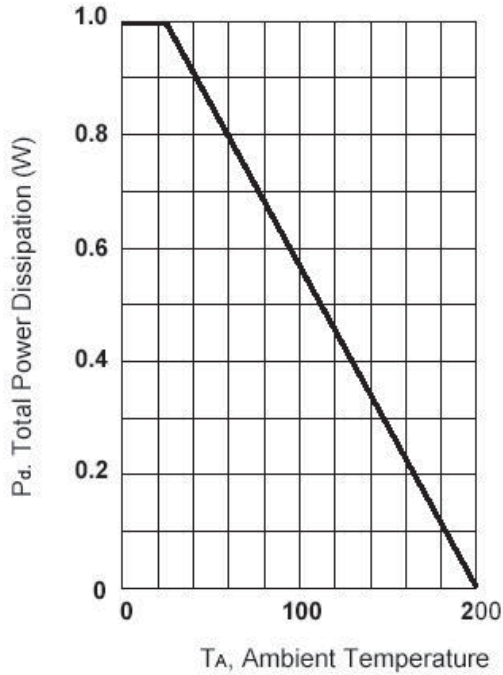
Breakdown characteristics $T_i = \text{constant}$ (pulsed)



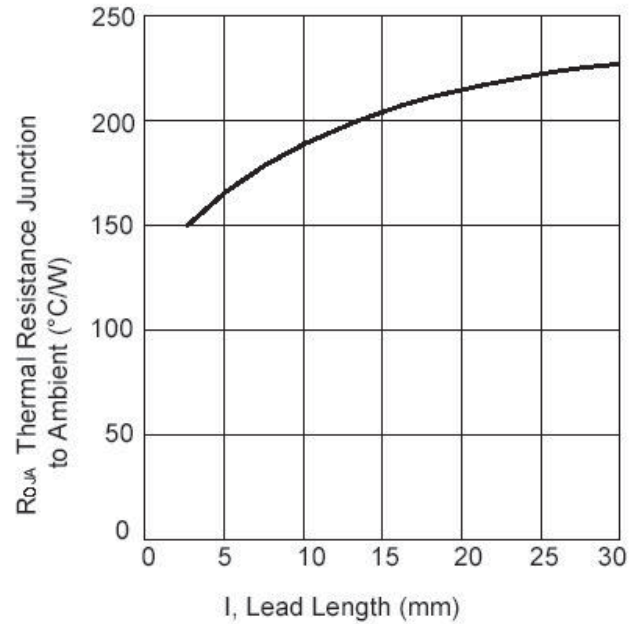
RATINGS AND CHARACTERISTIC CURVES

Electrical Specification ($T_A=25@25^{\circ}\text{C}$ unless otherwise specified)

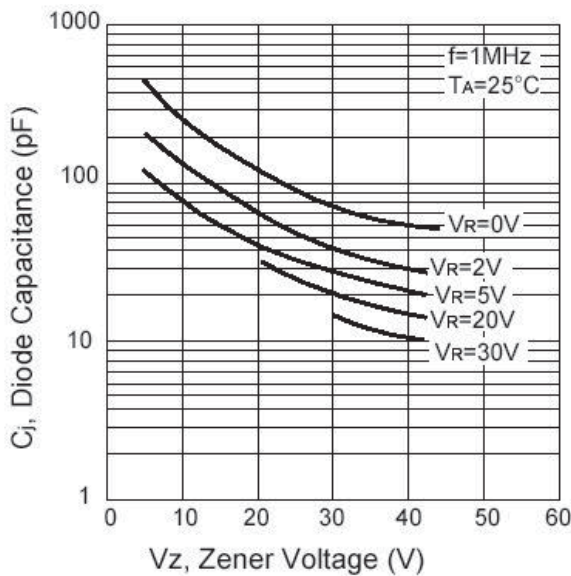
Power Dissipation vs Ambient Temperature



Typical Thermal Resistance vs. Lead Length



Junction Capacitance vs Zener Voltage



Typical Zener Impedance vs. Zener Voltage

