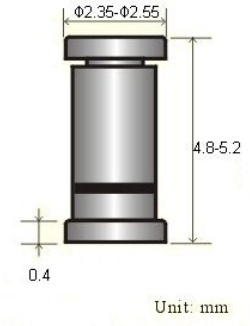
ZM47xxA Series



特征 Features

- 反向漏电小; Low Reverse Leakage
- 齐纳击穿阻抗低; Low Zener Impedance
- 最大功率耗散 1000mW; Power Dissipation of 1000mW
- 高稳定性和可靠性。High Stability and High Reliability

机械数据 Mechanical Data

- 封装: LL41 玻璃封装 Case: LL41 Glass Case
- 极性: 色环端为负极 Polarity: Color band denotes cathode end
- 安装位置: 任意 Mounting Position: Any

极限值和温度特性(TA = 25℃ 除非另有规定)

Maximum Ratings & Thermal Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified.)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
功率消耗 Power Dissipation	Pd	1000 [1)]	mW
工作结温 Operating junction temperature	Tj	175	℃
存储温度 Storage temperature range	Ts	-65-+150	℃

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

电特性 (TA = 25℃ 除非另有规定)

Electrical Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified).

型号 TYPE	稳压值 Zener Voltage		反向电流 Reverse Carrent		动态电阻 Dynamic Resistance	
	Vz(V)	Test Condition	Ir(uA)	Test Condition	rd(Ω)	Test Condition
	Nom.	Iz(mA)	Max.	Vr(V)	Max.	Iz(mA)
ZM4727A	3.0	83.0	150	1.0	10	83.0
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
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

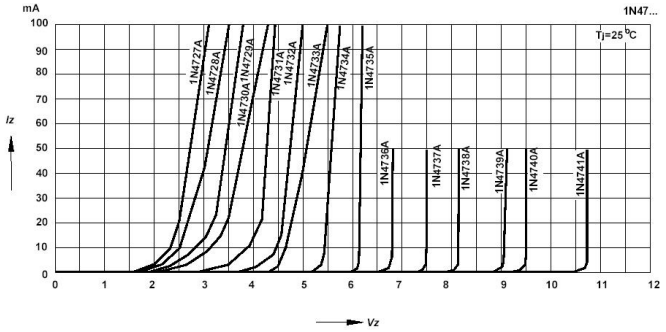
型号 TYPE*	稳压值 Zener Voltage		反向电流 Reverse Carrent		动态电阻 Dynamic Resistance	
	Vz(V)	Test Condition	Ir(uA)	Test Condition	rd(Ω)	Test Condition
	Nom.	Iz(mA)	Max.	Vr(V)	Max.	Iz(mA)
ZM4745A	16	15.5	5	12.2	16	15.5
ZM4746A	18	14.0	5	13.7	20	14.0
ZM4747A	20	12.5	5	15.2	22	12.5
ZM4748A	22	11.5	5	16.7	23	11.5
ZM4749A	24	10.5	5	18.2	25	10.5
ZM4750A	27	9.5	5	20.6	35	9.5
ZM4751A	30	8.5	5	22.8	40	8.5
ZM4752A	33	7.5	5	25.1	45	7.5
ZM4753A	36	7.0	5	27.4	50	7.0
ZM4754A	39	6.5	5	29.7	60	6.5
ZM4755A	43	6.0	5	32.7	70	6.0
ZM4756A	47	5.5	5	35.8	80	5.5
ZM4757A	51	5.0	5	38.8	95	5.0
ZM4758A	56	4.5	5	42.6	110	4.5
ZM4759A	62	4.0	5	47.1	125	4.0
ZM4760A	68	3.7	5	51.7	150	3.7
ZM4761A	75	3.3	5	56.0	175	3.3
ZM4762A	82	3.0	5	62.2	200	3.0
ZM4763A	91	2.8	5	69.2	250	2.8
ZM4764A	100	2.5	5	76.0	350	2.5

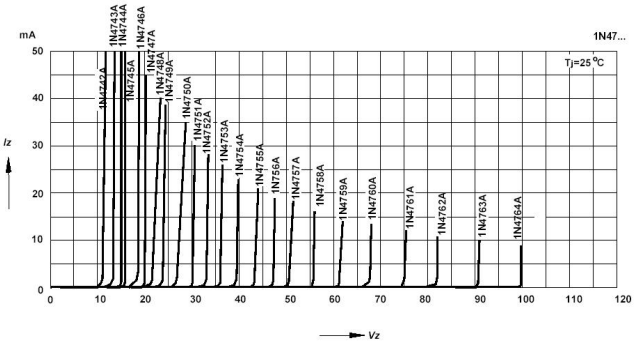
Notes:

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 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

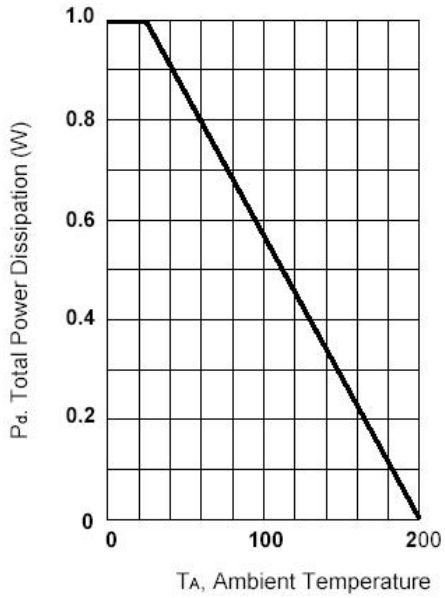
*Measure under thermal equilibrium and DC current test conditions(TA=25℃)
Tolerance on nominal Vz value: ±5%.
Tight tolerances on preferred voltages: ZM47…C: ±2%;
ZM47…D: ±1%.
These diodes are also available in DO-41 case with the type designation 1N4728...1N4764

Breakdown characteristics Tj = constant (pulsed)

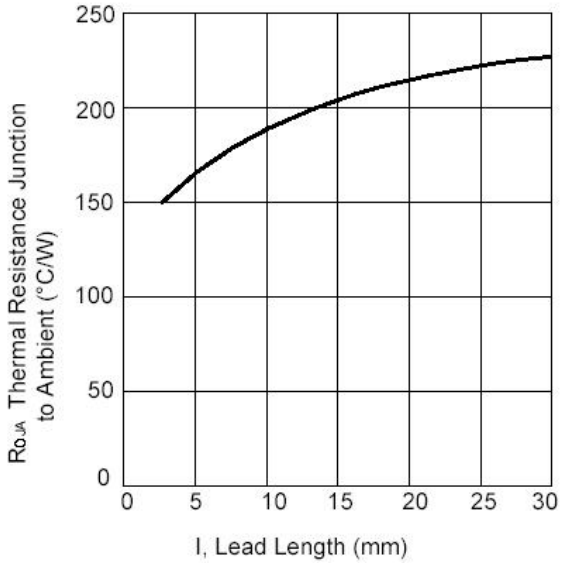




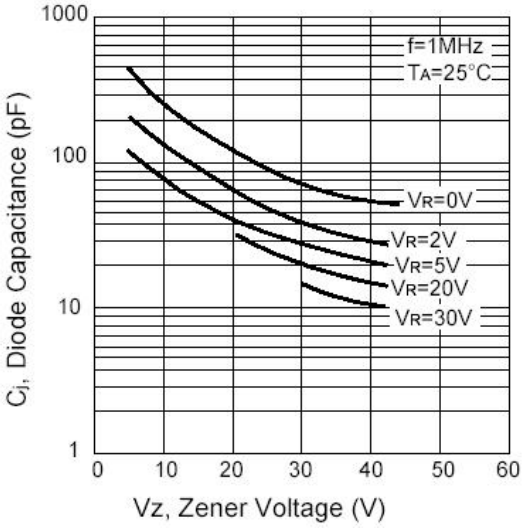
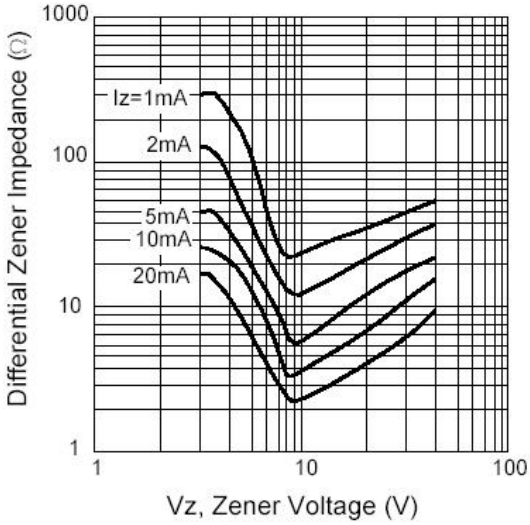
Power Dissipation vs Ambient Temperature



Typical Thermal Resistance vs. Lead Length



Junction Capacitance vs Zener Voltage



Typical Zener Impedance vs. Zener Voltage