

ZM4728A-ZM4764A

Zener Diodes

V_Z : 3.3 to 100V

P_D : 1W



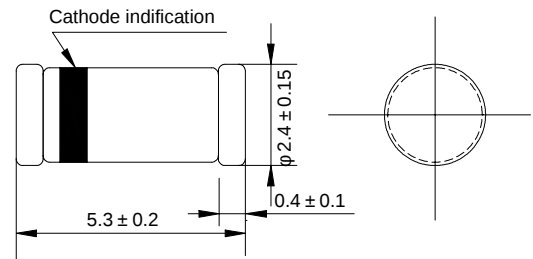
Features

- ✧ Silicon planar power zener diodes
- ✧ For use in stabilizing and clipping circuits with higher power rating.
- ✧ Standard zener voltage tolerance is $\pm 5\%$.
- ✧ Other zener voltages and tolerances are available upon request.
- ✧ These diodes are also available in the DO-41 case with type designation 1N4728A ... 1N4764A
- ✧ **Pb / RoHS Free**

Mechanical Data

- ✧ Case : MELF Glass Case
- ✧ Weight : 0.25 g (approximately)

MELF



Dimensions in millimeters

Maximum Ratings and Thermal Characteristics

Rating at 25 °C

Parameter	Symbol	Value	Unit
Zener Current see Table "Characteristics"			
Maximum Forward Voltage at $I_F = 200$ mA.	V_F	1.2	V
Power Dissipation	P_D	1 ⁽¹⁾	W
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	170 ⁽¹⁾	°C/W
Junction temperature	T_J	-65 to + 200	°C
Storage temperature range	T_S	-65 to + 200	°C

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

ELECTRICAL CHARACTERISTICS

($T = 25^{\circ}\text{C}$)

Type	Nominal Zener Voltage		Maximum Zener Impedance ⁽¹⁾			Maximum Reverse Leakage Current		Maximum DC Zener Current
	V _Z @ I _{ZT}	I _{ZT}	Z _{zT} @ I _{ZT}	Z _{zK} @ I _{ZK}	I _{ZK}	I _R @ V _R		I _{ZM} ⁽²⁾
	(V)	(mA)	(Ω)	(Ω)	(mA)	(μA)	(V)	(mA)
ZM4728A	3.3	76.0	10	400	1.0	100	1.0	276
ZM4729A	3.6	69.0	10	400	1.0	100	1.0	252
ZM4730A	3.9	64.0	9.0	400	1.0	50	1.0	234
ZM4731A	4.3	58.0	9.0	400	1.0	10	1.0	217
ZM4732A	4.7	53.0	8.0	500	1.0	10	1.0	193
ZM4733A	5.1	49.0	7.0	550	1.0	10	1.0	178
ZM4734A	5.6	45.0	5.0	600	1.0	10	2.0	162
ZM4735A	6.2	41.0	2.0	700	1.0	10	3.0	146
ZM4736A	6.8	37.0	3.5	700	1.0	10	4.0	133
ZM4737A	7.5	34.0	4.0	700	0.5	10	5.0	121
ZM4738A	8.2	31.0	4.5	700	0.5	10	6.0	110
ZM4739A	9.1	28.0	5.0	700	0.5	10	7.0	100
ZM4740A	10	25.0	7.0	700	0.25	10	7.6	91
ZM4741A	11	23.0	8.0	700	0.25	5.0	8.4	83
ZM4742A	12	21.0	9.0	700	0.25	5.0	9.1	76
ZM4743A	13	19.0	10	700	0.25	5.0	9.9	69
ZM4744A	15	17.0	14	700	0.25	5.0	11.4	61
ZM4745A	16	15.5	16	700	0.25	5.0	12.2	57
ZM4746A	18	14.0	20	750	0.25	5.0	13.7	50
ZM4747A	20	12.5	22	750	0.25	5.0	15.2	45
ZM4748A	22	11.5	23	750	0.25	5.0	16.7	41
ZM4749A	24	10.5	25	750	0.25	5.0	18.2	38
ZM4750A	27	9.5	35	750	0.25	5.0	20.6	34
ZM4751A	30	8.5	40	1000	0.25	5.0	22.8	30
ZM4752A	33	7.5	45	1000	0.25	5.0	25.1	27
ZM4753A	36	7.0	50	1000	0.25	5.0	27.4	25
ZM4754A	39	6.5	60	1000	0.25	5.0	29.7	23
ZM4755A	43	6.0	70	1500	0.25	5.0	32.7	22
ZM4756A	47	5.5	80	1500	0.25	5.0	35.8	19
ZM4757A	51	5.0	95	1500	0.25	5.0	38.8	18
ZM4758A	56	4.5	110	2000	0.25	5.0	42.6	16
ZM4759A	62	4.0	125	2000	0.25	5.0	47.1	14
ZM4760A	68	3.7	150	2000	0.25	5.0	51.7	13
ZM4761A	75	3.3	175	2000	0.25	5.0	56.0	12
ZM4762A	82	3.0	200	3000	0.25	5.0	62.2	11
ZM4763A	91	2.8	250	3000	0.25	5.0	69.2	10
ZM4764A	100	2.5	350	3000	0.25	5.0	76.0	9.0

Notes: (1) The Zener impedance is derived from the 1KHz AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (I_{ZT} I_{ZK} I_{ZT} I_{ZK}) insure a sharp knee on the breakdown curve and to eliminate unstable units

(2) Valid provided that electrodes at a distance of 10mm from case are kept at ambient temperature

(3) The type number listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$.