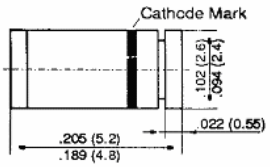
Technical Data
Data Sheet N0152, Rev. A

Green Products

ZM4731-ZM4764(A)

ZENER DIODES

MELF



FEATURE

- For use stabilizing and clipping circuits with high power rating.
- Silicon Planar Power Zener Diodes.
- Standard Zener voltage tolerance is ±10%.Add suffix "A" for ±5% tolerance. Other Zener voltages and tolerances are available upon request.
- These diodes are also available in DO-41 case with the type designation 1N4728...1N4764.
- This is a Pb-Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

MECHANICAL DATA

- Case: MELF Glass Case
- Weight:approx.0.25g
- Molding resin
- Epoxy resin UL:94V-0
- Marking: Part Name, SSG and Date Code

ORDERING INFORMATION

Device	Package	Shipping
ZM4731-ZM4764(A)	MELF (Pb-Free)	5000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

	SYMBOLS	*VALUE*	*UNITS*
Zener Current see Table Characteristics			
Power Dissipation at Tamb=25℃(Note 1)	P_{tot}	1.0	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{STG}	-65 to + 150	°C
Thermal resistance junction ambient(Note 1)	$R_{\theta JA}$	170	°C/W
Forward voltage at I_F=100mA	V_F	1.2	V

Note 1: Valid provided that leads at a distance of 10mm from case are kept at ambient temperature

ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Type	Nominal Zener voltage[3] at I_{ZT} V_Z (V)	Test current I_{ZT} (mA)	Maximum Zener impedance[1] Z_{ZT} at I_{ZT} (Ω)	Z_{ZK} (Ω)	at I_{ZK} (mA)	Maximum reverse leakage current I_R (μA)	at V_R (V)	Surge current at T_A = 25°C I_R (mA)	Maximum regulator current[2] I_{ZM} (mA)
ZM4728	3.3	76	10	400	1.0	100	1.0	1380	276
ZM4729	3.6	69	10	400	1.0	100	1.0	1260	252
ZM4730	3.9	64	9	400	1.0	50	1.0	1190	234
ZM4731	4.3	58	9	400	1.0	10	1.0	1070	217
ZM4732	4.7	53	8	500	1.0	10	1.0	970	193
ZM4733	5.1	49	7	550	1.0	10	1.0	890	178
ZM4734	5.6	45	5	600	1.0	10	2.0	810	162
ZM4735	6.2	41	2	700	1.0	10	3.0	730	146
ZM4736	6.8	37	3.5	700	1.0	10	4.0	660	133
ZM4737	7.5	34	4.0	700	0.5	10	5.0	605	121
ZM4738	8.2	31	4.5	700	0.5	10	6.0	550	110
ZM4739	9.1	28	5.0	700	0.5	10	7.0	500	100
ZM4740	10	25	7	700	0.25	10	7.6	454	91
ZM4741	11	23	8	700	0.25	5	8.4	414	83
ZM4742	12	21	9	700	0.25	5	9.1	380	76
ZM4743	13	19	10	700	0.25	5	9.9	344	69
ZM4744	15	17	14	700	0.25	5	11.4	304	61
ZM4745	16	15.5	16	700	0.25	5	12.2	285	57
ZM4746	18	14	20	750	0.25	5	13.7	250	50
ZM4747	20	12.5	22	750	0.25	5	15.2	225	45
ZM4748	22	11.5	23	750	0.25	5	16.7	205	41
ZM4749	24	10.5	25	750	0.25	5	18.2	190	38
ZM4750	27	9.5	35	750	0.25	5	20.6	170	34
ZM4751	30	8.5	40	1000	0.25	5	22.8	150	30
ZM4752	33	7.5	45	1000	0.25	5	25.1	135	27
ZM4753	36	7.0	50	1000	0.25	5	27.4	125	25
ZM4754	39	6.5	60	1000	0.25	5	29.7	115	23
ZM4755	43	6.0	70	1500	0.25	5	32.7	110	22
ZM4756	47	5.5	80	1500	0.25	5	35.8	95	19
ZM4757	51	5.0	95	1500	0.25	5	38.8	90	18
ZM4758	56	4.5	110	2000	0.25	5	42.6	80	16
ZM4759	62	4.0	125	2000	0.25	5	47.1	70	14
ZM4760	68	3.7	150	2000	0.25	5	51.7	65	13
ZM4761	75	3.3	175	2000	0.25	5	56.0	60	12
ZM4762	82	3.0	200	3000	0.25	5	62.2	55	11
ZM4763	91	2.8	250	3000	0.25	5	69.2	50	10
ZM4764	100	2.5	350	3000	0.25	5	76.0	45	9

NOTES:

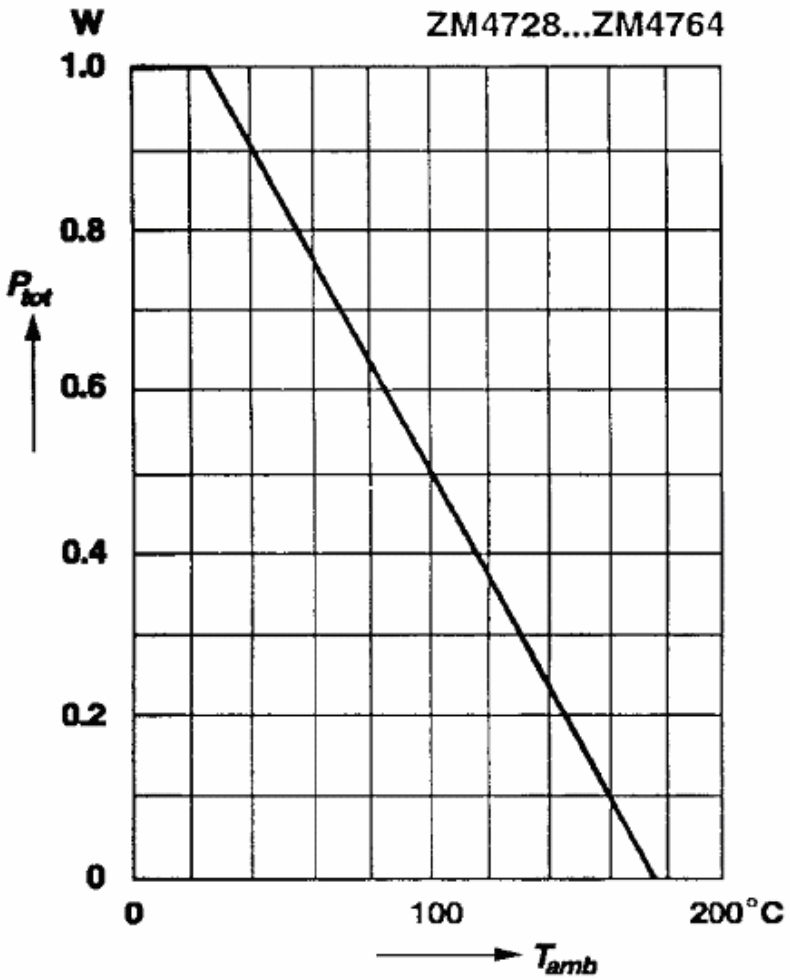
(1) The Zener impedance is derived from the 1KHz AC voltage which results when an AC current having an RMS value equal to 10% of the Zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK}. Zener impedance is measured at two points to insure a sharp knee on the breakdown curve and to eliminate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

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

(3) Measured under thermal equilibrium and DC test conditions

Admissible power dissipation versus ambient temperature

Valid provided that electrodes are kept at ambient temperature



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• Weiqi Street, Airport Development Zone, Jiangning District, Nanjing, China 211113 (86) 25-87123907 •
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