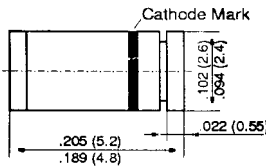


ZM4731A-G-ZM4764A-G
ZENER DIODES

MELF



Dimensions are in inches and (millimeters)

FEATURE

- ◆ For use stabilizing and clipping circuits with high power rating.
- ◆ Silicon Planar Power Zener Diodes.
- ◆ Standard Zener voltage tolerance is $\pm 10\%$. Add suffix "A" for $\pm 5\%$ 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.
- ◆ Green Products in Compliance with the RoHS Directive

MECHANICAL DATA

- ◆ Case: MELF Glass Case
- ◆ Weight: approx. 0.25g

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	VALUE	UNITS
Zener Current see Table Characteristics			
Power Dissipation at Tamb=25°C(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 _{θJA}	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

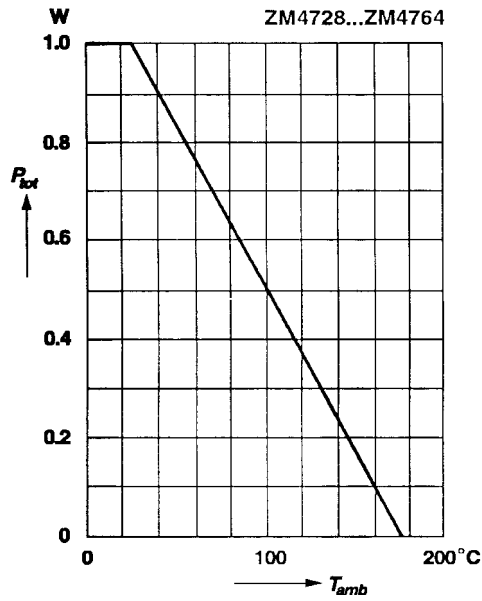
Ratings at 25°C ambient temperature unless otherwise specified.

Type	Nominal Zener voltage ⁽³⁾ at I _{ZT} V _Z (V)	Test current I _{ZT} (mA)	Maximum Zener impedance ⁽¹⁾			Maximum reverse leakage current		Surge current at T _A = 25°C I _R (mA)	Maximum regulator current ⁽²⁾ I _{ZM} (mA)
			Z _{ZT} at I _{ZT} (Ω)	Z _{ZK} (Ω)	at I _{ZK} (mA)	I _R (μA)	at V _R (V)		
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



DISCLAIMER:

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the Sensitron Semiconductor sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall Sensitron Semiconductor be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). Sensitron Semiconductor assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall Sensitron Semiconductor be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or Sensitron Semiconductor.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of Sensitron Semiconductor.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.