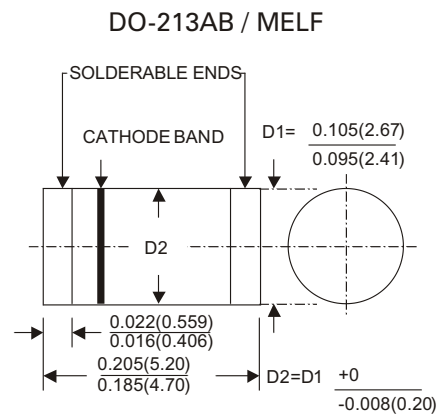


ZM4728A thru ZM4764A

SILICON PLANAR POWER ZENER DIODES



Dimension in inches (millimeters)

FEATURES

- For use in stabilizing and clipping circuits with high power Rating. Standard Zener Voltage tolerance is $\pm 10\%$. Add suffix "A" for $\pm 5\%$ tolerance and suffix "B" for $\pm 2\%$ tolerance. Other tolerances available are upon request.

MECHANICAL DATA

These diodes are also available in do-41 case with the type Designation 1N4728...1N4767

These diodes are delivered taped.
Details see "Taping"

Absolute Maximum Ratings ($T_A=25^\circ\text{C}$)

	SYMBOL	VALUE	UNITS
Zener Current see Table "Characteristics"			
Power Dissipation	P_{tot}	1 ¹⁾	W
Junction Temperature	T_J	175	$^\circ\text{C}$
Storage Temperature range	T_S	-65 to +175	$^\circ\text{C}$
1) Valid provided that electrodes are kept at ambient temperature			

Characteristics at $T_{amb}=25^\circ\text{C}$

	SYMBOL	Min	Typ	Max	UNITS
Thermal Resistance Junction to Ambient Air	R_{thA}			170 ¹⁾	K/W
Forward Voltage at $I_F=200\text{mA}$	V_F			1.2	V
1) Valid provided that electrodes are kept at ambient temperature					

ZM4728A thru ZM4764A

SILICON PLANAR POWER ZENER DIODES

ELECTRICAL CHARACTERISTICS (at $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Type	Nominal Zener Voltage ³⁾	Test Current	Maximum Zener Impedance ¹⁾			Maximum Reverse Leakage Current		Surge Current	Maximum Regulator Current ²⁾
	at I_{ZT} V_Z V	I_{ZT} mA	at I_{ZT} V_Z Ω	V_Z K Ω	at I_{ZK} mA	I_R μ A	at V_R V	At $T_A=25^{\circ}\text{C}$ I_R mA	I_{ZM} mA
ZM4728A	3.3	76	10	400	1	150	1	1375	275
ZM4729A	3.6	79	10	400	1	100	1	1260	252
ZM4730A	3.9	64	9	400	1	100	1	1190	234
ZM4731A	4.3	58	9	400	1	50	1	1070	217
ZM4732A	4.7	53	8	500	1	10	1	970	193
ZM4733A	5.1	49	7	550	1	10	1	890	178
ZM4734A	5.6	45	5	600	1	10	2	810	162
ZM4735A	6.2	41	2	700	1	10	3	730	146
ZM4736A	6.8	37	3.5	700	1	10	4	660	133
ZM4737A	7.5	34	4.0	700	0.5	10	5	605	121
ZM4738A	8.2	31	4.5	700	0.5	10	6	550	110
ZM4739A	9.1	28	5.0	700	0.5	10	7	500	100
ZM4740A	10	25	7	700	0.25	10	7.6	454	91
ZM4741A	11	23	8	700	0.25	5	8.4	414	83
ZM4742A	12	21	9	700	0.25	5	9.1	380	76
ZM4743A	13	19	10	700	0.25	5	9.9	344	69
ZM4744A	15	17	14	700	0.25	5	11.4	304	61
ZM4745A	16	15.5	16	700	0.25	5	12.2	285	57
ZM4746A	18	14	20	750	0.25	5	13.7	250	50
ZM4747A	20	12.5	22	750	0.25	5	15.2	225	45
ZM4748A	22	11.5	23	750	0.25	5	16.7	205	41
ZM4749A	24	10.5	25	750	0.25	5	18.2	190	38
ZM4750A	27	9.5	35	750	0.25	5	20.6	170	34
ZM4751A	30	8.5	40	1000	0.25	5	22.8	150	30
ZM4752A	33	7.5	45	1000	0.25	5	25.1	135	27
ZM4753A	36	7.0	50	1000	0.25	5	27.4	125	25
ZM4754A	39	6.5	60	1000	0.25	5	29.7	115	23
ZM4755A	43	6.0	70	1500	0.25	5	32.7	110	22
ZM4756A	47	5.5	80	1500	0.25	5	35.8	95	19
ZM4757A	51	5.0	95	1500	0.25	5	38.8	90	18
ZM4758A	56	4.5	110	2000	0.25	5	42.6	80	16
ZM4759A	62	4.0	125	2000	0.25	5	47.1	70	14
ZM4760A	68	3.7	150	2000	0.25	5	51.7	65	134
ZM4761A	75	3.3	175	2000	0.25	5	56.0	60	12
ZM4762A	82	3.0	200	3000	0.25	5	62.2	55	11
ZM4763A	91	2.8	250	3000	0.25	5	69.2	50	10
ZM4764A	100	2.5	350	3000	0.25	5	76	45	9

1) The Zener Impedance is derived from the 60Hz 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 are kept at ambient temperature.

3) Measured under thermal equilibrium and DC test conditions.

ZM4728A thru ZM4764A

SILICON PLANAR POWER ZENER DIODES

RATING AND CHARACTERISTICS CURVES ZM4728 THRU ZM4764

Admissible power dissipation
versus ambient temperature
Valid provided that electrodes are kept
at ambient temperature

