

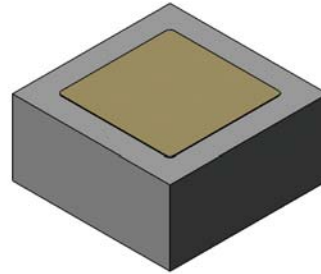
Zener Diode Chip Series

CD4728A thru CD4764A



Features

- All junctions completely protected with silicon dioxide
- 0.5 Watt capability with proper heat sinking
- Electrically equivalent to 1N4728A thru 1N4764A
- Compatible with all wire bonding and die attach techniques with the exception of solder reflow.



Maximum Ratings

Operating Temperature: -65°C to +175°C

Storage Temperature: -65°C to +175°C

Forward Voltage @ 200mA: 1.5 volts maximum

Electrical Specifications @ +25 °C (Unless Otherwise Specified)

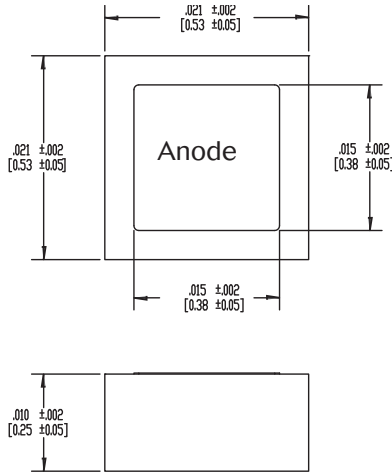
TYPE NUMBER	NOMINAL ZENER VOLTAGE $V_Z @ I_{ZT}$ (NOTE 1)	ZENER TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE $Z_{ZT} @ I_{ZT}$ (NOTE 2)	MAXIMUM REVERSE CURRENT $I_R @ V_R$	TEST FACTOR V_R	MAXIMUM KNEE IMPEDANCE Z_{ZK} (NOTE 2)	TEST CURRENT I_{ZK}
	VOLTS	mA	OHMS	μA	VOLTS	OHMS	mA
CD4728A	3.3	76	10	100	1	400	1.0
CD4729A	3.6	69	10	100	1	400	1.0
CD4730A	3.9	64	9	100	1	400	1.0
CD4731A	4.3	58	9	10	1	400	1.0
CD4732A	4.7	53	8	10	1	500	1.0
CD4733A	5.1	49	7	5	1	550	1.0
CD4734A	5.6	45	5	5	2	600	1.0
CD4735A	6.2	41	2	5	3	700	1.0
CD4736A	6.8	37	3.5	3	4	700	1.0
CD4737A	7.5	34	4	3	5	700	0.5
CD4738A	8.2	31	4.5	3	6	700	0.5
CD4739A	9.1	28	5	3	7	700	0.5
CD4740A	10.0	25	7	3	7.6	700	0.25
CD4741A	11.0	23	8	2	8.4	700	0.25
CD4742A	12.0	21	9	1	9.1	700	0.25
CD4743A	13.0	29	10	0.5	9.9	700	0.25
CD4744A	15.0	17	14	0.1	11.4	700	0.25
CD4745A	16.0	15.5	16	0.1	12.2	700	0.25
CD4746A	18.0	14	20	0.1	13.7	750	0.25
CD4747A	20.0	12.5	22	0.1	15.2	750	0.25
CD4748A	22.0	11.5	23	0.1	16.7	750	0.25
CD4749A	24.0	10.5	25	0.1	18.2	750	0.25
CD4750A	27.0	9.5	35	0.1	20.6	750	0.25
CD4751A	30.0	8.5	40	0.1	22.8	1000	0.25
CD4752A	33.0	7.5	45	0.1	25.1	1000	0.25
CD4753A	36.0	7.0	50	0.1	27.4	1000	0.25
CD4754A	39.0	6.5	60	0.1	29.7	1000	0.25
CD4755A	43.0	6.0	70	0.1	32.7	1500	0.25
CD4756A	47.0	5.5	80	0.1	35.8	1500	0.25
CD4757A	51.0	5.0	95	0.1	38.8	1500	0.25
CD4758A	56.0	4.5	110	0.1	42.6	2000	0.25
CD4759A	462.0	4.0	125	0.1	47.1	2000	0.25
CD4760A	68.0	3.7	150	0.1	51.7	2000	0.25
CD4761A	75.0	3.3	175	0.1	56.0	2000	0.25
CD4762A	82.0	3.0	200	0.1	62.2	3000	0.25
CD4763A	91.0	2.8	250	0.1	69.2	3000	0.25
CD4764A	100.0	2.5	350	0.1	76.0	3000	0.25

NOTE 1 Zener voltage range equals nominal Zener voltage. $\pm 5\%$ for "A" Suffix. No Suffix denotes $\pm 10\%$. Zener voltage is read using a pulse measurement, 10 milliseconds maximum. "C" suffix = + 2% and "D" suffix = + 1%.

NOTE 2 Zener impedance is derived by superimposing on I_{ZT} a 60Hz rms ac current equal to 10 % of I_{ZT} .



Outline Drawing



DESIGN DATA

METALLIZATION: Top: (Anode) Al
Back: (Cathode) Au

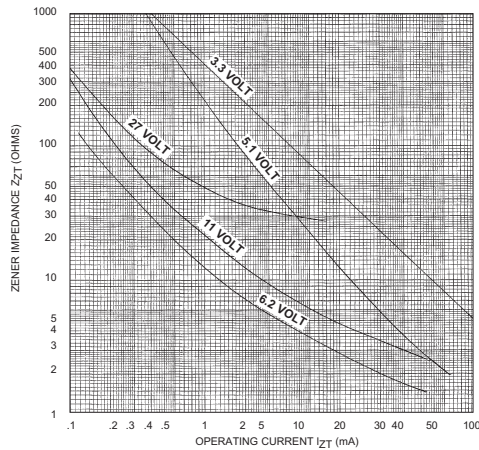
AL THICKNESS: 25,000 Å Minimum

GOLD THICKNESS: 4,000 Å Minimum

CHIP THICKNESS: 10 Mils

CIRCUIT LAYOUT DATA: For Zener operation, cathode must be operated positive with respect to anode.

Graphs



ZENER IMPEDANCE VS. OPERATING CURRENT

Aeroflex / Metelics, Inc.

975 Stewart Drive,
Sunnyvale, CA 94085
Tel: (408) 737-8181
Fax: (408) 733-7645

Sales: 888-641-SEMI (7364)

Hi-Rel Components

9 Hampshire Street,
Lawrence, MA 01840
Tel: (603) 641-3800
Fax: (978) 683-3264

www.aeroflex.com/metelics-hirelcomponents

54 Grenier Field Road,
Londonderry, NH 03053
Tel: (603) 641-3800
Fax: (603)-641-3500

www.aeroflex.com/metelics metelics-sales@aeroflex.com

Aeroflex / Metelics, Inc. reserves the right to make changes to any products and services herein at any time without notice. Consult Aeroflex or an authorized sales representative to verify that the information in this data sheet is current before using this product. Aeroflex does not assume any responsibility or liability arising out of the application or use of any product or service described herein, except as expressly agreed to in writing by Aeroflex; nor does the purchase, lease, or use of a product or service from Aeroflex convey a license under any patent rights, copyrights, trademark rights, or any other of the intellectual rights of Aeroflex or of third parties.

Copyright 2011 Aeroflex / Metelics. All rights reserved.

ISO 9001: 2008 certified companies



Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused.