

Zener Diode Chip Series

CD4614 thru CD4627

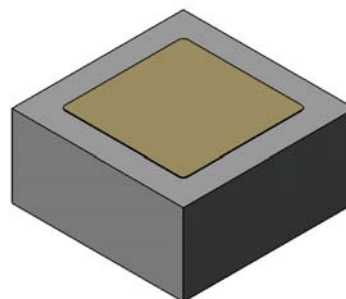


Available in JANHC and JANKC per MIL-PRF-19500/435



Features

- All junctions completely protected with silicon dioxide
- 0.5 Watt capability with proper heat sinking
- Electrically equivalent to 1N4614 thru 1N4627
- 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)

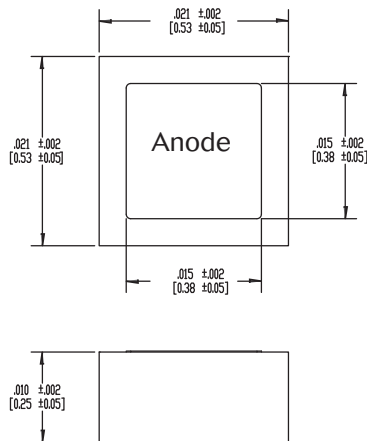
TYPE NUMBER	NOMINAL ZENER VOLTAGE $V_Z @ I_{ZT}$ (Note 1)	ZENER TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE $Z_{ZT} @ I_{ZT}$ (Note 2)	MAXIMUM REVERSE LEAKAGE CURRENT $I_R @ V_R$	
	VOLTS	μA	OHMS	μA	VOLTS
CD4614	1.8	250	1200	7.5	1
CD4615	2.0	250	1250	5.0	1
CD4616	2.2	250	1300	4.0	1
CD4617	2.4	250	1400	2.0	1
CD4618	2.7	250	1500	1.0	1
CD4619	3.0	250	1600	0.8	1
CD4620	3.3	250	1650	7.5	1.5
CD4621	3.6	250	1700	7.5	2
CD4622	3.9	250	1650	5.0	2
CD4623	4.3	250	1600	4.0	2
CD4624	4.7	250	1550	10.0	3
CD4625	5.1	250	1500	10.0	3
CD4626	5.6	250	1400	10.0	4
CD4627	6.2	250	1200	10.0	5

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

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



Outline Drawing



DESIGN DATA

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

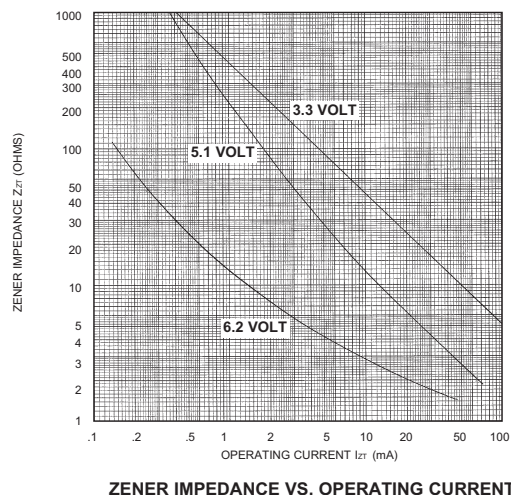
AL THICKNESS: 25,000 Å Minimum

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

ISO 9001: 2008 certified companies

www.aeroflex.com/metelics

metelics-sales@aeroflex.com

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