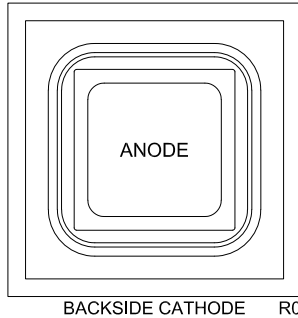


The CPZ48X-1N4614 thru CPZ48X-1N4627 are silicon Zener diodes ideal for all types of commercial, industrial, entertainment, and computer applications.



**MECHANICAL SPECIFICATIONS:**

Die Size	13 x 13 MILS
Die Thickness	5.5 MILS
Anode Bonding Pad Size	7.0 x 7.0 MILS
Top Side Metalization	Ti/Al – 13,000Å
Back Side Metalization	Au-As – 9,000Å
Scribe Alley Width	1.97 MILS
Wafer Diameter	5 INCHES
Gross Die Per Wafer	101,184

**MAXIMUM RATINGS:**

Operating and Storage Junction Temperature

**SYMBOL**

$T_J, T_{stg}$

-65 to +150

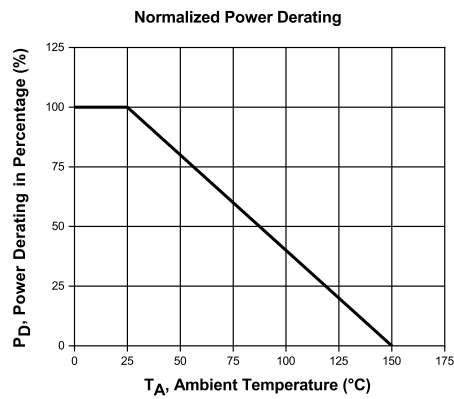
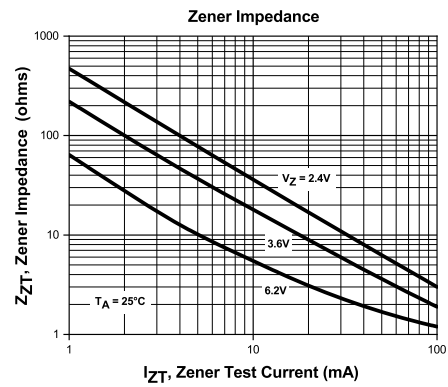
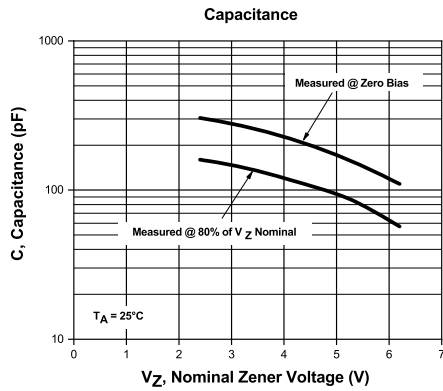
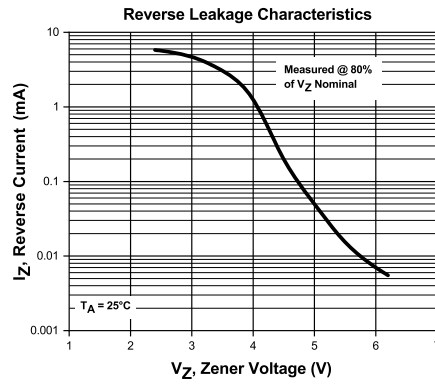
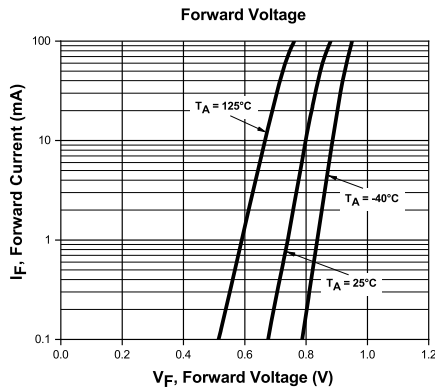
**UNITS**

°C

**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$ )  $V_F=1.0\text{V MAX @ } I_F=200\text{mA}$  (for all types)

Type	Zener Voltage $V_Z @ I_{ZT}$			Test Current $I_{ZT}$ $\mu\text{A}$	Maximum Zener Impedance $Z_{ZT} @ I_{ZT}$ $\Omega$	Maximum Reverse Current		Maximum Zener Current $I_{ZM}$ mA	Maximum Noise Density $N_D @ 250\mu\text{A}$ $\mu\text{V}/\sqrt{\text{Hz}}$
	MIN	NOM	MAX			$I_R @ V_R$ $\mu\text{A}$	V		
	V	V	V						
CPZ48X-1N4614	1.710	1.8	1.890	250	1200	7.5	1.0	120	1.0
CPZ48X-1N4615	1.900	2.0	2.100	250	1250	5.0	1.0	110	1.0
CPZ48X-1N4616	2.090	2.2	2.310	250	1300	4.0	1.0	100	1.0
CPZ48X-1N4617	2.280	2.4	2.520	250	1400	2.0	1.0	95	1.0
CPZ48X-1N4618	2.565	2.7	2.835	250	1500	1.0	1.0	90	1.0
CPZ48X-1N4619	2.850	3.0	3.150	250	1600	0.8	1.0	85	1.0
CPZ48X-1N4620	3.135	3.3	3.465	250	1650	7.5	1.5	80	1.0
CPZ48X-1N4621	3.420	3.6	3.780	250	1700	7.5	2.0	75	1.0
CPZ48X-1N4622	3.705	3.9	4.095	250	1650	5.0	2.0	70	1.0
CPZ48X-1N4623	4.085	4.3	4.515	250	1600	4.0	2.0	65	1.0
CPZ48X-1N4624	4.465	4.7	4.935	250	1550	10	3.0	60	1.0
CPZ48X-1N4625	4.845	5.1	5.355	250	1500	10	3.0	55	2.0
CPZ48X-1N4626	5.320	5.6	5.880	250	1400	10	4.0	50	4.0
CPZ48X-1N4627	5.890	6.2	6.510	250	1200	10	5.0	45	5.0

CPZ48X-1N4614 THRU  
 CPZ48X-1N4627  
 Zener Diode Die  
 250mW, 1.8 THRU 6.2 VOLT



## BARE DIE PACKING OPTIONS

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### BARE DIE IN TRAY (WAFFLE) PACK

**CT:** Singulated die in tray (waffle) pack.  
(example: CP211-PART NUMBER-CT)

**CM:** Singulated die in tray (waffle) pack 100% visually inspected as per MIL-STD-750, (method 2072 transistors, method 2073 diodes).  
(example: CP211-PART NUMBER-CM)

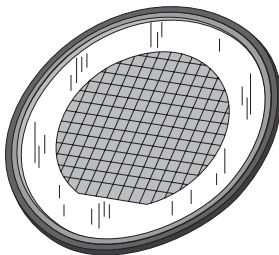
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### UNSAWN WAFER

**WN:** Full wafer, unsawn, 100% tested with reject die inked.  
(example: CP211-PART NUMBER-WN)

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### SAWN WAFER ON PLASTIC RING

**WR:** Full wafer, sawn and mounted on plastic ring,  
100% tested with reject die inked.  
(example: CP211-PART NUMBER-WR)

Please note: Sawn Wafer on Metal Frame (WS) is possible as a special order. Please contact your Central Sales Representative at 631-435-1110.



Visit the Central website for a complete listing of specifications:  
[www.centrasemi.com/bdspecs](http://www.centrasemi.com/bdspecs)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

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**Worldwide Distributors:**  
[www.centrasemi.com/wwdistributors](http://www.centrasemi.com/wwdistributors)

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