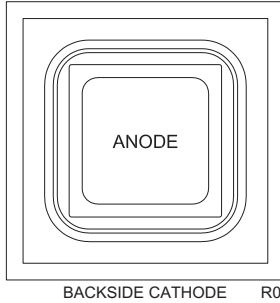


The CPZ58X-1N4099 thru CPZ58X-1N4109 are silicon Zener diodes ideal for all types of commercial, industrial, entertainment, and computer applications.



**MECHANICAL SPECIFICATIONS:**

Die Size	13 x 13 MILS
Die Thickness	5.5 MILS
Anode Bonding Pad Size	5.9 x 5.9 MILS
Top Side Metalization	AlSiCu – 35,000Å
Back Side Metalization	AuAs – 12,000Å
Scribe Alley Width	1.79 MILS
Wafer Diameter	6 INCHES
Gross Die Per Wafer	142,858

**MAXIMUM RATINGS:**

Operating and Storage Junction Temperature

**SYMBOL**

$T_J, T_{stg}$

-65 to +150

**UNITS**

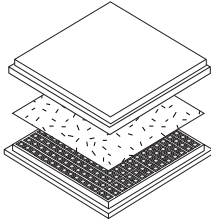
°C

**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$ )  $V_F=1.1\text{V MAX @ } I_F=200\text{mA}$  (for all types)

Type	Zener Voltage $V_Z @ I_{ZT}$			Test Current	Maximum Zener Impedance	Maximum Reverse Current		Maximum Zener Current	Maximum Noise Density
	MIN	NOM	MAX			$I_R$	@ $V_R$		
	V	V	V	$I_{ZT}$ $\mu\text{A}$	$Z_{ZT} @ I_{ZT}$ $\Omega$	$\mu\text{A}$	V	mA	$N_D @ 250\mu\text{A}$ $\mu\text{V}/\sqrt{\text{Hz}}$
CPZ58X-1N4099	6.460	6.8	7.140	250	200	10	5.2	35.0	40
CPZ58X-1N4100	7.125	7.5	7.875	250	200	10	5.7	31.8	40
CPZ58X-1N4101	7.790	8.2	8.610	250	200	1.0	6.3	29.0	40
CPZ58X-1N4102	8.265	8.7	9.135	250	200	1.0	6.7	27.4	40
CPZ58X-1N4103	8.645	9.1	9.555	250	200	1.0	7.0	26.2	40
CPZ58X-1N4104	9.50	10	10.50	250	200	1.0	7.6	24.8	40
CPZ58X-1N4105	10.45	11	11.55	250	200	0.05	8.5	21.6	40
CPZ58X-1N4106	11.40	12	12.60	250	200	0.05	9.2	20.4	40
CPZ58X-1N4107	12.35	13	13.65	250	200	0.05	9.9	19.0	40
CPZ58X-1N4108	13.30	14	14.70	250	200	0.05	10.7	17.5	40
CPZ58X-1N4109	14.25	15	15.75	250	100	0.05	11.4	16.3	40

## BARE DIE PACKING OPTIONS

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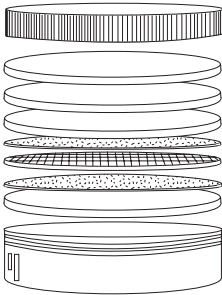


### BARE DIE IN TRAY (WAFFLE) PACK

**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)

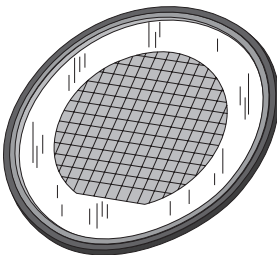
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### UNSAWN WAFER

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

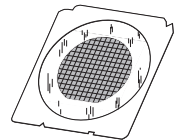
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### SAWN WAFER ON PLASTIC RING

**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:**  
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