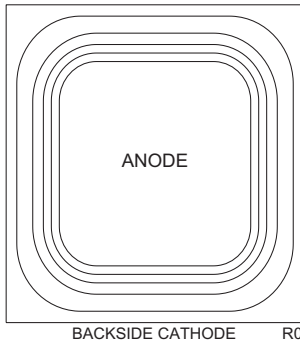


The CPZ25-1N4728A thru CPZ25-1N4761A are silicon Zener diodes ideal for all types of commercial, industrial, entertainment, and computer applications.



**MECHANICAL SPECIFICATIONS:**

Die Size	33.5 x 33.5 MILS
Die Thickness	7.9 MILS
Anode Bonding Pad Size	22 x 22 MILS
Top Side Metalization	Ti/Ag – 500Å/30,000Å
Back Side Metalization	Ni/Ag – 2,000Å/7,000Å
Scribe Alley Width	2.17 MILS
Wafer Diameter	5 INCHES
Gross Die Per Wafer	14,796

**MAXIMUM RATINGS:**

Operating and Storage Junction Temperature

**SYMBOL**

$T_J, T_{stg}$

-65 to +150

**UNITS**

°C

**ELECTRICAL CHARACTERISTICS: ( $T_A=25^\circ\text{C}$ )  $V_F=1.2\text{V MAX @ } I_F=200\text{mA}$  (for all types)**

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT	MAXIMUM TEMPERATURE COEFFICIENT @ $I_{ZT}$
	MIN	NOM	MAX	$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$	$I_{ZM}$	$\Theta V_Z$		
	V	V	V	mA	$\Omega$	$\Omega$	$\mu\text{A}$	V	mA	% / °C	
CPZ25-1N4728A	3.135	3.3	3.465	76	10	400	1.0	100	1.0	1380	-0.08 to -0.05
CPZ25-1N4729A	3.420	3.6	3.780	69	10	400	1.0	100	1.0	1260	-0.08 to -0.05
CPZ25-1N4730A	3.705	3.9	4.095	64	9.0	400	1.0	50	1.0	1190	-0.07 to -0.02
CPZ25-1N4731A	4.085	4.3	4.515	58	9.0	400	1.0	10	1.0	1070	-0.07 to -0.01
CPZ25-1N4732A	4.465	4.7	4.935	53	8.0	500	1.0	10	1.0	970	-0.03 to +0.04
CPZ25-1N4733A	4.845	5.1	5.355	49	7.0	550	1.0	10	1.0	890	-0.01 to +0.04
CPZ25-1N4734A	5.320	5.6	5.880	45	5.0	600	1.0	10	2.0	810	0 to +0.045
CPZ25-1N4735A	5.890	6.2	6.510	41	2.0	700	1.0	10	3.0	730	+0.01 to +0.055
CPZ25-1N4736A	6.460	6.8	7.140	37	3.5	700	1.0	10	4.0	660	+0.015 to +0.06
CPZ25-1N4737A	7.125	7.5	7.875	34	4.0	700	0.5	10	5.0	605	+0.02 to +0.065
CPZ25-1N4738A	7.790	8.2	8.610	31	4.5	700	0.5	10	6.0	550	+0.03 to +0.07
CPZ25-1N4739A	8.645	9.1	9.555	28	5.0	700	0.5	10	7.0	500	+0.035 to +0.075
CPZ25-1N4740A	9.500	10	10.50	25	7.0	700	0.25	10	7.6	454	+0.04 to +0.08
CPZ25-1N4741A	10.45	11	11.55	23	8.0	700	0.25	5.0	8.4	414	+0.045 to +0.08
CPZ25-1N4742A	11.40	12	12.60	21	9.0	700	0.25	5.0	9.1	380	+0.045 to +0.085
CPZ25-1N4743A	12.35	13	13.65	19	10	700	0.25	5.0	9.9	344	+0.05 to +0.085

Note:  $V_Z$  Tolerance is  $\pm 5\%$ .

R1 (16-May 2019)

**CPZ25-1N4728A THRU  
CPZ25-1N4761A  
Zener Diode Die  
1.0W, 3.3 THRU 75 VOLT**

**ELECTRICAL CHARACTERISTICS - Continued: ( $T_A=25^\circ\text{C}$ )  $V_F=1.2\text{V MAX @ } I_F=200\text{mA}$  (for all types)**

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT	MAXIMUM TEMPERATURE COEFFICIENT @ $I_{ZT}$
	MIN	NOM	MAX	$I_{ZT}$	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$	$I_{ZM}$	$\Theta_{VZ}$		
	V	V	V	mA	$\Omega$	$\Omega$	$\mu\text{A}$	V	mA	% / $^\circ\text{C}$	
CPZ25-1N4744A	14.25	15	15.75	17	14	700	0.25	5.0	11.4	304	+0.055 to +0.09
CPZ25-1N4745A	15.20	16	16.80	15.5	16	700	0.25	5.0	12.2	285	+0.055 to +0.09
CPZ25-1N4746A	17.10	18	18.90	14	20	750	0.25	5.0	13.7	250	+0.06 to +0.09
CPZ25-1N4747A	19.00	20	21.00	12.5	22	750	0.25	5.0	15.2	225	+0.06 to +0.09
CPZ25-1N4748A	20.90	22	23.10	11.5	23	750	0.25	5.0	16.7	205	+0.06 to +0.095
CPZ25-1N4749A	22.80	24	25.20	10.5	25	750	0.25	5.0	18.2	190	+0.06 to +0.095
CPZ25-1N4750A	25.65	27	28.35	9.5	35	750	0.25	5.0	20.6	170	+0.06 to +0.095
CPZ25-1N4751A	28.50	30	31.50	8.5	40	1.0K	0.25	5.0	22.8	150	+0.06 to +0.095
CPZ25-1N4752A	31.35	33	34.65	7.5	45	1.0K	0.25	5.0	25.1	135	+0.06 to +0.095
CPZ25-1N4753A	34.20	36	37.80	7.0	50	1.0K	0.25	5.0	27.4	125	+0.06 to +0.095
CPZ25-1N4754A	37.05	39	40.95	6.5	60	1.0K	0.25	5.0	29.7	115	+0.06 to +0.095
CPZ25-1N4755A	40.85	43	45.15	6.0	70	1.5K	0.25	5.0	32.7	110	+0.06 to +0.095
CPZ25-1N4756A	44.65	47	49.35	5.5	80	1.5K	0.25	5.0	35.8	95	+0.06 to +0.095
CPZ25-1N4757A	48.45	51	53.55	5.0	95	1.5K	0.25	5.0	38.8	90	+0.06 to +0.095
CPZ25-1N4758A	53.20	56	58.80	4.5	110	2.0K	0.25	5.0	42.6	80	+0.06 to +0.095
CPZ25-1N4759A	58.90	62	65.10	4.0	125	2.0K	0.25	5.0	47.1	70	+0.06 to +0.095
CPZ25-1N4760A	64.60	68	71.40	3.7	150	2.0K	0.25	5.0	51.7	65	+0.06 to +0.095
CPZ25-1N4761A	71.25	75	78.75	3.3	175	2.0K	0.25	5.0	56.0	60	+0.06 to +0.095

Note:  $V_Z$  Tolerance is  $\pm 5\%$ .

## 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)

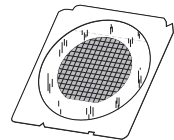
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### SAWN WAFER ON PLASTIC RING

**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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