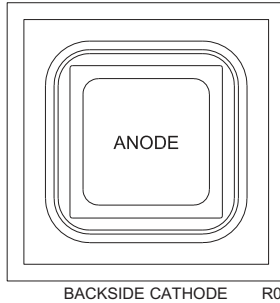


The CPZ28X-CMPZ5221B thru CPZ28X-CMPZ5267B are silicon Zener diodes ideal for all types of commercial, industrial, entertainment, and computer applications.



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: ($T_A=25^\circ\text{C}$) $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$ (for all types)

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM TEMPERATURE COEFFICIENT
	MIN	NOM	MAX	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$	V_R	Θ_{VZ}	
	V	V	V	mA	Ω	Ω	μA	V	% / °C	
CPZ28X-CMPZ5221B	2.280	2.4	2.520	20	30	1200	0.25	100	1.0	-0.085
CPZ28X-CMPZ5222B	2.375	2.5	2.625	20	30	1250	0.25	100	1.0	-0.085
CPZ28X-CMPZ5223B	2.565	2.7	2.835	20	30	1300	0.25	75	1.0	-0.080
CPZ28X-CMPZ5224B	2.660	2.8	2.940	20	30	1400	0.25	75	1.0	-0.080
CPZ28X-CMPZ5225B	2.850	3.0	3.150	20	29	1600	0.25	50	1.0	-0.075
CPZ28X-CMPZ5226B	3.135	3.3	3.465	20	28	1600	0.25	25	1.0	-0.070
CPZ28X-CMPZ5227B	3.420	3.6	3.780	20	24	1700	0.25	15	1.0	-0.065
CPZ28X-CMPZ5228B	3.705	3.9	4.095	20	23	1900	0.25	10	1.0	-0.060
CPZ28X-CMPZ5229B	4.085	4.3	4.515	20	22	2000	0.25	5.0	1.0	± 0.055
CPZ28X-CMPZ5230B	4.465	4.7	4.935	20	19	1900	0.25	5.0	2.0	± 0.030
CPZ28X-CMPZ5231B	4.845	5.1	5.335	20	17	1600	0.25	5.0	2.0	± 0.030
CPZ28X-CMPZ5232B	5.320	5.6	5.880	20	11	1600	0.25	5.0	3.0	+0.038
CPZ28X-CMPZ5233B	5.700	6.0	6.300	20	7.0	1600	0.25	5.0	3.5	+0.038
CPZ28X-CMPZ5234B	5.890	6.2	6.510	20	7.0	1000	0.25	5.0	4.0	+0.045
CPZ28X-CMPZ5235B	6.460	6.8	7.140	20	5.0	750	0.25	3.0	5.0	+0.050
CPZ28X-CMPZ5236B	7.125	7.5	7.875	20	6.0	500	0.25	3.0	6.0	+0.058
CPZ28X-CMPZ5237B	7.790	8.2	8.610	20	8.0	500	0.25	3.0	6.5	+0.062

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

R0 (16-December 2016)

**CPZ28X-CMPZ5221B THRU
CPZ28X-CMPZ5267B
Zener Diode Die
350mW, 2.4 THRU 75 VOLT**

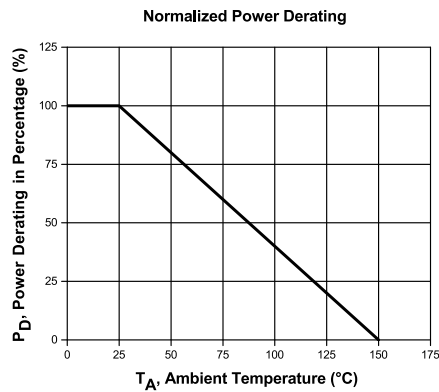
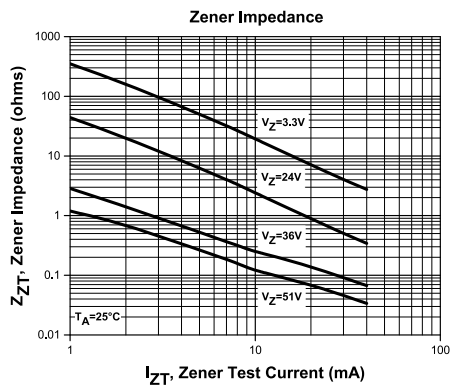
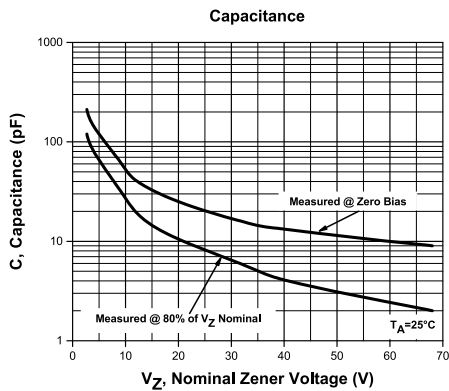
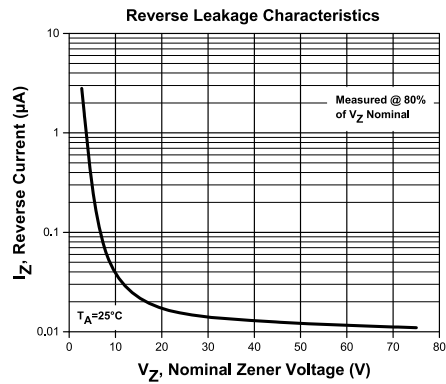
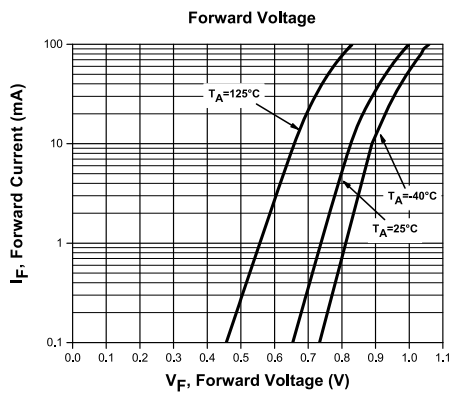


ELECTRICAL CHARACTERISTICS - Continued: (T_A=25°C) V_F=0.9V MAX @ I_F=10mA (for all types)

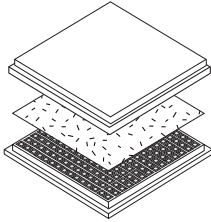
TYPE	ZENER VOLTAGE V _Z @ I _{ZT}			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM TEMPERATURE COEFFICIENT
	MIN	NOM	MAX	I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _R @ V _R	ΔV _Z		
	V	V	V	mA	Ω	Ω	μA	V	% / °C	
CPZ28X-CMPZ5238B	8.265	8.7	9.135	20	8.0	600	0.25	3.0	6.5	+0.065
CPZ28X-CMPZ5239B	8.645	9.1	9.555	20	10	600	0.25	3.0	7.0	+0.068
CPZ28X-CMPZ5240B	9.500	10	10.50	20	17	600	0.25	3.0	8.0	+0.075
CPZ28X-CMPZ5241B	10.45	11	11.55	20	22	600	0.25	2.0	8.4	+0.076
CPZ28X-CMPZ5242B	11.40	12	12.60	20	30	600	0.25	1.0	9.1	+0.077
CPZ28X-CMPZ5243B	12.35	13	13.65	9.5	13	600	0.25	0.5	9.9	+0.079
CPZ28X-CMPZ5244B	13.30	14	14.70	9.0	15	600	0.25	0.1	10	+0.082
CPZ28X-CMPZ5245B	14.25	15	15.75	8.5	16	600	0.25	0.1	11	+0.082
CPZ28X-CMPZ5246B	15.20	16	16.80	7.8	17	600	0.25	0.1	12	+0.083
CPZ28X-CMPZ5247B	16.15	17	17.85	7.4	19	600	0.25	0.1	13	+0.084
CPZ28X-CMPZ5248B	17.10	18	18.90	7.0	21	600	0.25	0.1	14	+0.085
CPZ28X-CMPZ5249B	18.05	19	19.95	6.6	23	600	0.25	0.1	14	+0.086
CPZ28X-CMPZ5250B	19.00	20	21.00	6.2	25	600	0.25	0.1	15	+0.086
CPZ28X-CMPZ5251B	20.90	22	23.10	5.6	29	600	0.25	0.1	17	+0.087
CPZ28X-CMPZ5252B	22.80	24	25.20	5.2	33	600	0.25	0.1	18	+0.088
CPZ28X-CMPZ5253B	23.75	25	26.25	5.0	35	600	0.25	0.1	19	+0.089
CPZ28X-CMPZ5254B	25.65	27	28.35	4.6	41	600	0.25	0.1	21	+0.090
CPZ28X-CMPZ5255B	26.60	28	29.40	4.5	44	600	0.25	0.1	21	+0.091
CPZ28X-CMPZ5256B	28.50	30	31.50	4.2	49	600	0.25	0.1	23	+0.091
CPZ28X-CMPZ5257B	31.35	33	34.65	3.8	58	700	0.25	0.1	25	+0.092
CPZ28X-CMPZ5258B	34.20	36	37.80	3.4	70	700	0.25	0.1	27	+0.093
CPZ28X-CMPZ5259B	37.05	39	40.95	3.2	80	800	0.25	0.1	30	+0.094
CPZ28X-CMPZ5260B	40.85	43	45.15	3.0	93	900	0.25	0.1	33	+0.095
CPZ28X-CMPZ5261B	44.65	47	49.35	2.7	105	1000	0.25	0.1	36	+0.095
CPZ28X-CMPZ5262B	48.45	51	53.55	2.5	125	1100	0.25	0.1	39	+0.096
CPZ28X-CMPZ5263B	53.20	56	58.80	2.2	150	1300	0.25	0.1	43	+0.096
CPZ28X-CMPZ5264B	57.00	60	63.00	2.1	170	1400	0.25	0.1	46	+0.097
CPZ28X-CMPZ5265B	58.90	62	65.10	2.0	185	1400	0.25	0.1	47	+0.097
CPZ28X-CMPZ5266B	64.60	68	71.40	1.8	230	1600	0.25	0.1	52	+0.097
CPZ28X-CMPZ5267B	71.25	75	78.75	1.7	270	1700	0.25	0.1	56	+0.098

Note: V_Z Tolerance is ±5%.

CPZ28X-CMPZ5221B THRU
 CPZ28X-CMPZ5267B
 Typical Electrical Characteristics



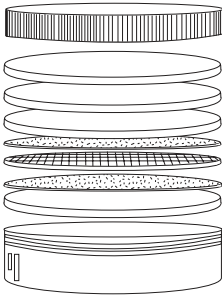
BARE DIE PACKING OPTIONS



BARE DIE IN TRAY (WAFFLE) PACK

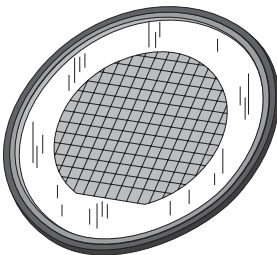
CT: Singulated die in tray (waffle) pack.
(example: CP211-PART NUMBER-CT)

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)



UNSAWN WAFER

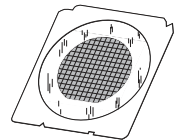
WN: Full wafer, unsawn, 100% tested with reject die inked.
(example: CP211-PART NUMBER-WN)



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

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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

DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2nd 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

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).

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
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Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centrasemi.com/terms



Product End of Life Notification

PDN ID:	PDN01257
Notification Date:	5/31/23
Last Buy Date:	Stock Only
Last Shipment Date	Stock Only

<https://www.centrasemi.com>

Please be advised that Central Semiconductor must immediately discontinue the product(s) listed in the attached PDN notice. Orders can only be accepted for products with available inventory on hand.

You may have purchased one or more of the products listed. Please do not hesitate to contact your local Central Semiconductor sales representative with any questions or needs you may have. Central regrets any inconvenience this may cause.

Sincerely,

Central Semiconductor Corp.

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.



<https://www.centalsemi.com>

Product End of Life Notification

PDN ID:	PDN01257
Notification Date:	5/31/23
Last Buy Date:	Stock Only
Last Shipment Date	Stock Only

Summary: The CPZ28X chip process is discontinued and the following items are now classified as End of Life (EOL).

Although Central Semiconductor makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by other manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's ongoing Product Portfolio Management. Any replacement products are noted below. The effective date for placing last purchase orders will be six (6) months from the date of this notice and twelve (12) months from the notice date for final shipments, and minimum order quantities may apply. The last purchase and shipment dates may be extended if inventory is available.

*** All Plating types (PBFREE,TIN/LEAD) for each item listed are included in this notice.**

Central Part Number	Suggested Replacement
CPZ28X-BZX55C3V3-CM	CPZ58X-BZX55C3V3-CM
CPZ28X-BZX55C3V3-CT	CPZ58X-BZX55C3V3-CT
CPZ28X-BZX55C3V3-WN	CPZ58X-BZX55C3V3-WN
CPZ28X-BZX55C6V8-CT	CPZ58X-BZX55C6V8-CT
CPZ28X-BZX55C6V8-WN	CPZ58X-BZX55C6V8-WN
CPZ28X-BZX84B5V1-CT	CPZ58X-BZX84B5V1-CT
CPZ28X-BZX84B5V1-WN	CPZ58X-BZX84B5V1-WN
CPZ28X-CMPZ5226B-WR	CPZ58X-CMPZ5226B-WR
CPZ28X-CMPZ5235B-CT	CPZ58X-CMPZ5235B-CT
CPZ28X-CMPZ5235B-WN	CPZ58X-CMPZ5235B-WN
CPZ28X-C5235B-CT20	N/A
CPZ28X-1N4099-CT	CPZ58X-1N4099-CT
CPZ28X-1N4099-WN	CPZ58X-1N4099-WN
CPZ28X-1N4623-CT	CPZ58X-1N4623-CT
CPZ28X-1N4623-WN	CPZ58X-1N4623-WN
CPZ28X-1N4692-CT	CPZ58X-1N4692-CT
CPZ28X-1N4692-WN	CPZ58X-1N4692-WN
CPZ28X-1N5237B-CT	CPZ58X-1N5237B-CT
CPZ28X-1N968B-WN	CPZ59X-1N968B-WN

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. If you would like assistance, please visit <https://my.centalsemi.com/submit-inquiry?type=ER> to submit an online inquiry.

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.