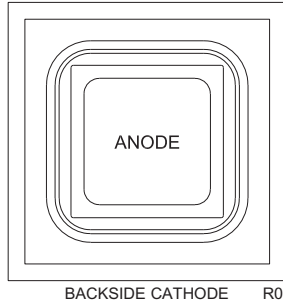


The CPZ28X-1N5985B thru CPZ28X-1N6020B are silicon Zener diodes ideal for all types of commercial, industrial, entertainment, and computer applications.



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: ($T_A=25^{\circ}\text{C}$) $V_F=1.5\text{V MAX @ } I_F=100\text{mA}$ (for all types)

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT
	MIN	NOM	MAX	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$			
	V	V	V	mA	Ω	Ω	μA			
CPZ28X-1N5985B	2.280	2.4	2.520	5.0	100	1.8K	0.25	100	1.0	208
CPZ28X-1N5986B	2.565	2.7	2.835	5.0	100	1.9K	0.25	75	1.0	185
CPZ28X-1N5987B	2.850	3.0	3.150	5.0	95	2.0K	0.25	50	1.0	167
CPZ28X-1N5988B	3.135	3.3	3.465	5.0	95	2.2K	0.25	25	1.0	152
CPZ28X-1N5989B	3.420	3.6	3.780	5.0	90	2.3K	0.25	15	1.0	139
CPZ28X-1N5990B	3.705	3.9	4.095	5.0	90	2.4K	0.25	10	1.0	128
CPZ28X-1N5991B	4.085	4.3	4.515	5.0	88	2.5K	0.25	5.0	1.0	116
CPZ28X-1N5992B	4.465	4.7	4.935	5.0	70	2.2K	0.25	3.0	1.5	106
CPZ28X-1N5993B	4.845	5.1	5.355	5.0	50	2.05K	0.25	2.0	2.0	98
CPZ28X-1N5994B	5.320	5.6	5.880	5.0	25	1.8K	0.25	2.0	3.0	89
CPZ28X-1N5995B	5.890	6.2	6.510	5.0	10	1.3K	0.25	1.0	4.0	81
CPZ28X-1N5996B	6.460	6.8	7.140	5.0	8.0	750	0.25	1.0	5.2	74
CPZ28X-1N5997B	7.125	7.5	7.875	5.0	7.0	600	0.25	0.5	6.0	67
CPZ28X-1N5998B	7.790	8.2	8.610	5.0	7.0	600	0.25	0.5	6.5	61
CPZ28X-1N5999B	8.645	9.1	9.555	5.0	10	600	0.25	0.1	7.0	55
CPZ28X-1N6000B	9.500	10	10.50	5.0	15	600	0.25	0.1	8.0	50
CPZ28X-1N6001B	10.45	11	11.55	5.0	18	600	0.25	0.1	8.4	45
CPZ28X-1N6002B	11.40	12	12.60	5.0	22	600	0.25	0.1	9.1	42
CPZ28X-1N6003B	12.35	13	13.65	5.0	25	600	0.25	0.1	9.9	38
CPZ28X-1N6004B	14.25	15	15.75	5.0	32	600	0.25	0.1	11	33
CPZ28X-1N6005B	15.20	16	16.80	5.0	36	600	0.25	0.1	12	31
CPZ28X-1N6006B	17.10	18	18.90	5.0	42	600	0.25	0.1	14	28
CPZ28X-1N6007B	19.00	20	21.00	5.0	48	600	0.25	0.1	15	25
CPZ28X-1N6008B	20.90	22	23.10	5.0	55	600	0.25	0.1	17	23
CPZ28X-1N6009B	22.80	24	25.20	5.0	62	600	0.25	0.1	18	21
CPZ28X-1N6010B	25.65	27	28.35	5.0	70	600	0.25	0.1	21	19

R0 (7-August 2017)

**CPZ28X-1N5985B THRU
CPZ28X-1N6020B
Zener Diode Die
500mW, 2.4 THRU 68 VOLT**



ELECTRICAL CHARACTERISTICS - Continued: ($T_A=25^{\circ}\text{C}$) $V_F=1.5\text{V MAX @ } I_F=100\text{mA}$ (for all types)

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT
	MIN	NOM	MAX	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$		I_{ZM}
	V	V	V	mA	Ω	Ω	mA	μA	V	mA
CPZ28X-1N6011B	28.50	30	31.50	5.0	78	600	0.25	100	23	17
CPZ28X-1N6012B	31.35	33	34.65	5.0	88	700	0.25	100	25	15
CPZ28X-1N6013B	34.20	36	37.80	5.0	95	700	0.25	100	27	14
CPZ28X-1N6014B	37.05	39	40.95	5.0	130	800	0.25	100	30	13
CPZ28X-1N6015B	40.85	43	45.15	2.0	150	900	0.25	100	33	12
CPZ28X-1N6016B	44.65	47	49.35	2.0	170	1.0K	0.25	100	36	11
CPZ28X-1N6017B	48.45	51	53.55	2.0	180	1.3K	0.25	100	39	9.8
CPZ28X-1N6018B	53.20	56	58.80	2.0	200	1.4K	0.25	100	43	8.9
CPZ28X-1N6019B	58.90	62	65.10	2.0	225	1.4K	0.25	100	47	8.0
CPZ28X-1N6020B	64.60	68	71.40	2.0	240	1.6K	0.25	100	52	7.4

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

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