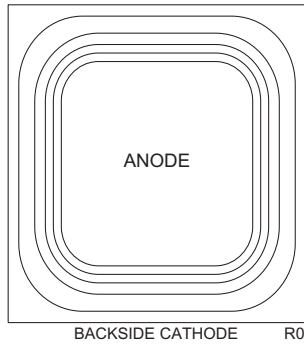


The CPZ25-CMZ5913B thru CPZ25-CMZ5946B are silicon Zener diodes ideal for all types of commercial, industrial, entertainment, and computer applications.



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: ($T_A=25^\circ\text{C}$) $V_F=1.5\text{V MAX @ } I_F=200\text{mA}$ (for all types)

Type	Zener Voltage V _Z @ I _{ZT}			Test Current	Maximum Zener Impedance			Maximum Reverse Current		Maximum Zener Current
	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
CPZ25-CMZ5913B	3.135	3.3	3.465	113.6	10	500	1.0	100	1.0	454
CPZ25-CMZ5914B	3.420	3.6	3.780	104.2	9.0	500	1.0	75	1.0	416
CPZ25-CMZ5915B	3.705	3.9	4.095	96.1	7.5	500	1.0	25	1.0	384
CPZ25-CMZ5916B	4.085	4.3	4.515	87.2	6.0	500	1.0	5.0	1.0	348
CPZ25-CMZ5917B	4.465	4.7	4.935	79.8	5.0	500	1.0	5.0	1.5	319
CPZ25-CMZ5918B	4.845	5.1	5.355	73.5	4.0	350	1.0	5.0	2.0	294
CPZ25-CMZ5919B	5.320	5.6	5.880	66.9	2.0	250	1.0	5.0	3.0	267
CPZ25-CMZ5920B	5.890	6.2	6.510	60.5	2.0	200	1.0	5.0	4.0	241
CPZ25-CMZ5921B	6.460	6.8	7.140	55.1	2.5	200	1.0	5.0	5.2	221
CPZ25-CMZ5922B	7.125	7.5	7.875	50.0	3.0	400	0.5	5.0	6.0	200
CPZ25-CMZ5923B	7.790	8.2	8.610	45.7	3.5	400	0.5	5.0	6.5	183
CPZ25-CMZ5924B	8.645	9.1	9.555	41.2	4.0	500	0.5	5.0	7.0	165
CPZ25-CMZ5925B	9.500	10	10.50	37.5	4.5	500	0.25	5.0	8.0	150
CPZ25-CMZ5926B	10.45	11	11.55	34.1	5.5	550	0.25	1.0	8.4	136
CPZ25-CMZ5927B	11.40	12	12.60	31.2	6.5	550	0.25	1.0	9.1	125

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

R1 (16-May 2019)

**CPZ25-CMZ5913B THRU
CPZ25-CMZ5946B
Zener Diode Die
1.5W, 3.3 THRU 75 VOLT**

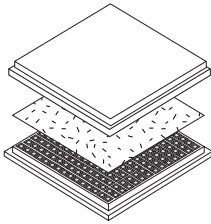


ELECTRICAL CHARACTERISTICS - Continued: ($T_A=25^\circ\text{C}$) $V_F=1.5\text{V MAX}$ @ $I_F=200\text{mA}$ (for all types)

Type	Zener Voltage V _Z @ I _{ZT}			Test Current	Maximum Zener Impedance			Maximum Reverse Current		Maximum Zener Current
	MIN	NOM	MAX		I _{ZT}	Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}	I _R @ V _R		
	V	V	V	mA	Ω	Ω	mA	μA	V	mA
CPZ25-CMZ5928B	12.35	13	13.65	28.8	7.0	550	0.25	1.0	9.9	115
CPZ25-CMZ5929B	14.25	15	15.75	25.0	9.0	600	0.25	1.0	11.4	100
CPZ25-CMZ5930B	15.20	16	16.80	23.4	10	600	0.25	1.0	12.2	94
CPZ25-CMZ5931B	17.10	18	18.90	20.8	12	650	0.25	1.0	13.7	83
CPZ25-CMZ5932B	19.00	20	21.00	18.7	14	650	0.25	1.0	15.2	75
CPZ25-CMZ5933B	20.90	22	23.10	17.0	17.5	650	0.25	1.0	16.7	68
CPZ25-CMZ5934B	22.80	24	25.20	15.6	19	700	0.25	1.0	18.2	63
CPZ25-CMZ5935B	25.65	27	28.35	13.9	23	700	0.25	1.0	20.6	56
CPZ25-CMZ5936B	28.50	30	31.50	12.5	26	750	0.25	1.0	22.8	50
CPZ25-CMZ5937B	31.35	33	34.65	11.4	33	800	0.25	1.0	25.1	45
CPZ25-CMZ5938B	34.20	36	37.80	10.4	38	850	0.25	1.0	27.4	42
CPZ25-CMZ5939B	37.05	39	40.95	9.6	45	900	0.25	1.0	29.7	38
CPZ25-CMZ5940B	40.85	43	45.15	8.7	53	950	0.25	1.0	32.7	35
CPZ25-CMZ5941B	44.65	47	49.35	8.0	67	1000	0.25	1.0	35.8	32
CPZ25-CMZ5942B	48.45	51	53.55	7.3	70	1100	0.25	1.0	38.8	29
CPZ25-CMZ5943B	53.20	56	58.80	6.7	86	1300	0.25	1.0	42.6	27
CPZ25-CMZ5944B	58.90	62	65.10	6.0	100	1500	0.25	1.0	47.1	24
CPZ25-CMZ5945B	64.60	68	71.40	5.5	120	1700	0.25	1.0	51.7	22
CPZ25-CMZ5946B	71.25	75	78.75	5.0	140	2000	0.25	1.0	56.0	20

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

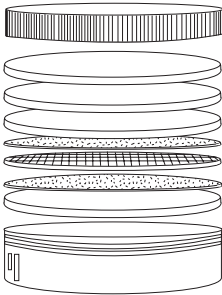
BARE DIE PACKING OPTIONS



BARE DIE IN TRAY (WAFFLE) PACK

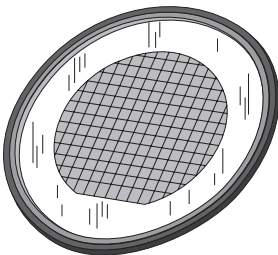
CT: Singulated die in tray (waffle) pack.
(example: CP211-PART NUMBER-CT)

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

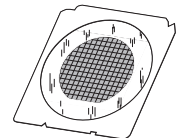
WN: Full wafer, unsawn, 100% tested with reject die inked.
(example: CP211-PART NUMBER-WN)



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).

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