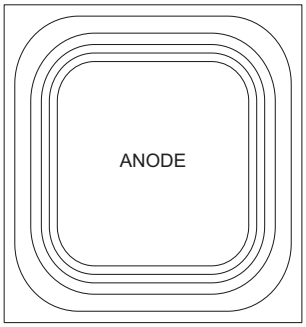
www.centralsemi.com

CPZ25-1N5913B THRU CPZ25-1N5946B
Zener Diode Die
1.5W, 3.3 THRU 75 VOLT

The CPZ25-1N5913B thru CPZ25-1N5946B are silicon Zener diodes ideal for all types of commercial, industrial, entertainment, and computer applications.



BACKSIDE CATHODE R0

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:	**SYMBOL**		**UNITS**
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	°C

ELECTRICAL CHARACTERISTICS: (T_A=25°C) V_F=1.5V MAX @ I_F=200mA (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
CPZ25-1N5913B	3.135	3.3	3.465	113.6	10	500	1.0	100	1.0	454
CPZ25-1N5914B	3.420	3.6	3.780	104.2	9.0	500	1.0	75	1.0	416
CPZ25-1N5915B	3.705	3.9	4.095	96.1	7.5	500	1.0	25	1.0	384
CPZ25-1N5916B	4.085	4.3	4.515	87.2	6.0	500	1.0	5.0	1.0	348
CPZ25-1N5917B	4.465	4.7	4.935	79.8	5.0	500	1.0	5.0	1.5	319
CPZ25-1N5918B	4.845	5.1	5.355	73.5	4.0	350	1.0	5.0	2.0	294
CPZ25-1N5919B	5.320	5.6	5.880	66.9	2.0	250	1.0	5.0	3.0	267
CPZ25-1N5920B	5.890	6.2	6.510	60.5	2.0	200	1.0	5.0	4.0	241
CPZ25-1N5921B	6.460	6.8	7.140	55.1	2.5	200	1.0	5.0	5.2	221
CPZ25-1N5922B	7.125	7.5	7.875	50.0	3.0	400	0.5	5.0	6.0	200
CPZ25-1N5923B	7.790	8.2	8.610	45.7	3.5	400	0.5	5.0	6.5	183
CPZ25-1N5924B	8.645	9.1	9.555	41.2	4.0	500	0.5	5.0	7.0	165
CPZ25-1N5925B	9.500	10	10.50	37.5	4.5	500	0.25	5.0	8.0	150
CPZ25-1N5926B	10.45	11	11.55	34.1	5.5	550	0.25	1.0	8.4	136
CPZ25-1N5927B	11.40	12	12.60	31.2	6.5	550	0.25	1.0	9.1	125

Note: V_Z Tolerance is ±5%.

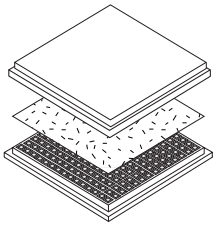
R1 (16-May 2019)

ELECTRICAL CHARACTERISTICS - Continued: (T_A=25°C) V_F=1.5V MAX @ I_F=200mA (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
CPZ25-1N5928B	12.35	13	13.65	28.8	7.0	550	0.25	1.0	9.9	115
CPZ25-1N5929B	14.25	15	15.75	25.0	9.0	600	0.25	1.0	11.4	100
CPZ25-1N5930B	15.20	16	16.80	23.4	10	600	0.25	1.0	12.2	94
CPZ25-1N5931B	17.10	18	18.90	20.8	12	650	0.25	1.0	13.7	83
CPZ25-1N5932B	19.00	20	21.00	18.7	14	650	0.25	1.0	15.2	75
CPZ25-1N5933B	20.90	22	23.10	17.0	17.5	650	0.25	1.0	16.7	68
CPZ25-1N5934B	22.80	24	25.20	15.6	19	700	0.25	1.0	18.2	63
CPZ25-1N5935B	25.65	27	28.35	13.9	23	700	0.25	1.0	20.6	56
CPZ25-1N5936B	28.50	30	31.50	12.5	26	750	0.25	1.0	22.8	50
CPZ25-1N5937B	31.35	33	34.65	11.4	33	800	0.25	1.0	25.1	45
CPZ25-1N5938B	34.20	36	37.80	10.4	38	850	0.25	1.0	27.4	42
CPZ25-1N5939B	37.05	39	40.95	9.6	45	900	0.25	1.0	29.7	38
CPZ25-1N5940B	40.85	43	45.15	8.7	53	950	0.25	1.0	32.7	35
CPZ25-1N5941B	44.65	47	49.35	8.0	67	1000	0.25	1.0	35.8	32
CPZ25-1N5942B	48.45	51	53.55	7.3	70	1100	0.25	1.0	38.8	29
CPZ25-1N5943B	53.20	56	58.80	6.7	86	1300	0.25	1.0	42.6	27
CPZ25-1N5944B	58.90	62	65.10	6.0	100	1500	0.25	1.0	47.1	24
CPZ25-1N5945B	64.60	68	71.40	5.5	120	1700	0.25	1.0	51.7	22
CPZ25-1N5946B	71.25	75	78.75	5.0	140	2000	0.25	1.0	56.0	20

Note: V_Z Tolerance is ±5%.

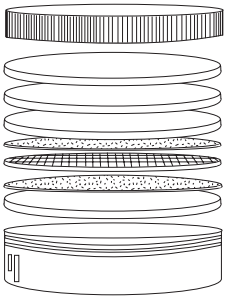
BARE DIE PACKING OPTIONS



BARE DIE IN TRAY (WAFFLE) PACK

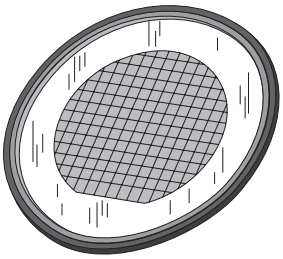
CT: Singulated die in tray (waffle) pack.
(example: CP211-PART NUMBER-CT)

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)



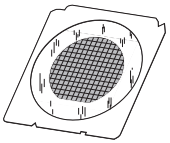
UNSAWN WAFER

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.centralsemi.com/bdspecs

R2 (3-April 2017)

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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