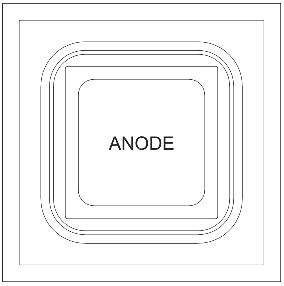
Central Semiconductor™
www.centralsemi.com

CPZ58X-BZX84B2V4 THRU CPZ58X-BZX84B15
Zener Diode Die
350mW, 2.4 THRU 47 VOLT

The CPZ58X-BZX84B2V4 thru CPZ58X-BZX84B15 are silicon Zener diodes ideal for all types of commercial, industrial, entertainment, and computer applications.



BACKSIDE CATHODE R0

MECHANICAL SPECIFICATIONS:

Die Size	13 x 13 MILS
Die Thickness	5.5 MILS
Anode Bonding Pad Size	5.9 x 5.9 MILS
Top Side Metalization	AlSiCu – 35kÅ
Back Side Metalization	Au-As – 12,000Å
Scribe Alley Width	1.69 MILS
Wafer Diameter	6 INCHES
Gross Die Per Wafer	142,858

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=0.9V MAX @ I_F=10mA (for all types)

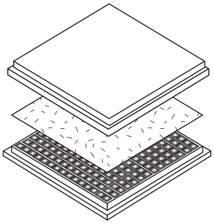
TYPE	ZENER VOLTAGE V_Z @ I_{ZT}			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT	MAXIMUM TEMPERATURE COEFFICIENT
	MIN	NOM	MAX	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @	I_{ZK}	I_R @	V_R	I_{ZM}	ΘV_Z
	V	V	V	mA	Ω	Ω	mA	μA	V	mA	% / °C
CPZ58X-BZX84B2V4	2.352	2.4	2.448	5.0	100	600	1.0	50	1.0	104	-0.06
CPZ58X-BZX84B2V7	2.646	2.7	2.754	5.0	100	600	1.0	20	1.0	92	-0.06
CPZ58X-BZX84B3V0	2.940	3.0	3.060	5.0	95	600	1.0	10	1.0	83	-0.06
CPZ58X-BZX84B3V3	3.234	3.3	3.366	5.0	95	600	1.0	5.0	1.0	76	-0.06
CPZ58X-BZX84B3V6	3.528	3.6	3.672	5.0	90	600	1.0	5.0	1.0	69	-0.06
CPZ58X-BZX84B3V9	3.822	3.9	3.978	5.0	90	600	1.0	3.0	1.0	64	-0.06
CPZ58X-BZX84B4V3	4.214	4.3	4.386	5.0	90	600	1.0	3.0	1.0	58	-0.05
CPZ58X-BZX84B4V7	4.606	4.7	4.794	5.0	80	500	1.0	3.0	2.0	53	-0.03
CPZ58X-BZX84B5V1	4.998	5.1	5.202	5.0	60	480	1.0	2.0	2.0	49	0.02
CPZ58X-BZX84B5V6	5.488	5.6	5.712	5.0	40	400	1.0	1.0	2.0	45	0.03
CPZ58X-BZX84B6V2	6.076	6.2	6.324	5.0	10	150	1.0	3.0	4.0	40	0.04
CPZ58X-BZX84B6V8	6.664	6.8	6.936	5.0	15	80	1.0	2.0	4.0	37	0.05
CPZ58X-BZX84B7V5	7.350	7.5	7.650	5.0	15	80	1.0	1.0	5.0	33	0.05
CPZ58X-BZX84B8V2	8.036	8.2	8.364	5.0	15	80	1.0	0.7	5.0	30	0.06
CPZ58X-BZX84B9V1	8.918	9.1	9.282	5.0	15	100	1.0	0.5	6.0	27	0.06
CPZ58X-BZX84B10	9.800	10	10.20	5.0	20	150	1.0	0.2	7.0	25	0.07
CPZ58X-BZX84B11	10.78	11	11.22	5.0	20	150	1.0	0.1	8.0	23	0.07

R0 (27-September 2023)

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 ZENER CURRENT	MAXIMUM TEMPERATURE COEFFICIENT
	MIN	NOM	MAX	I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @	I_{ZK}	I_R @	V_R	I_{ZM}	ΘV_Z
	V	V	V	mA	Ω	Ω	mA	μA	V	mA	% / °C
CPZ58X-BZX84B12	11.76	12	12.24	5.0	25	150	1.0	0.1	8.0	21	0.07
CPZ58X-BZX84B13	12.74	13	13.26	5.0	30	170	1.0	0.1	8.0	19	0.08
CPZ58X-BZX84B15	14.70	15	15.30	5.0	30	200	1.0	0.05	10.5	17	0.08

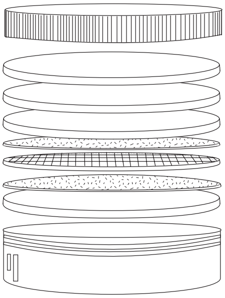
BARE DIE PACKING OPTIONS



BARE DIE IN TRAY (WAFFLE) PACK

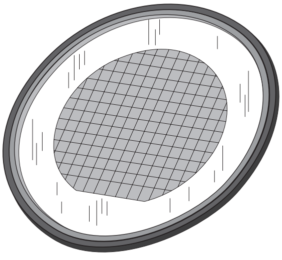
CT: Singulated die in tray (waffle) pack.
(example: CP211-PART NUMBER-CT)

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)



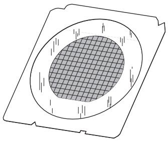
UNSAWN WAFER

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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