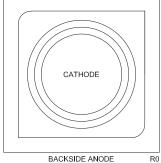


# **CPZ36R-CMATVS5V0 Uni-Directional TVS Die** 5.0 Volt

The CPZ36R-CMATVS5V0 is a silicon uni-directional transient voltage suppressor designed for low leakage and fast response against ESD spikes.



#### **MECHANICAL SPECIFICATIONS:**

Die Size	10.2 x 10.2 MILS
Die Thickness	3.9 MILS
Cathode Bonding Pad Size	7.0 MILS DIAMETER
Top Side Metalization	AI – 30,000Å
Back Side Metalization	Au – 12,000Å
Scribe Alley Width	1.97 MILS
Wafer Diameter	5 INCHES
Gross Die Per Wafer	163,034

BACKSIDE ANODE

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Electrical Fast Transient (IEC 61000-4-4) (5x50ns)	EFT	40	А
ESD Voltage (IEC 61000-4-2, Air)	VESD	30	kV
ESD Voltage (IEC 61000-4-2, Contact)	VESD	30	kV
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-55 to +150	°C

ELECTRICAL CHARACTERISTICS: (T<sub>A</sub>=25°C) V<sub>F</sub>=0.9V MAX @ I<sub>F</sub>=10mA (for all types)

Maximum Reverse Stand-off Voltage VRWM		U U	Maximum Reverse Leakage Current IR @ VRWM	Maximum Clamping Voltage (8x20µs) VC @ IPP		TLP CI	tage te 1)	Typical Dynamic Resistance (Note 1) R <sub>DYN</sub>	Typical Junction Capacitance @ 0V Bias CJ	
v	v	mA	μA	V	A	v	A	Ω	pF	
5.0	6.2	1.0	1.0	12.3	12.3	7.0	6.0	11.3	0.5	40
5.0	0.2	1.0	1.0			12.3		3.0	5.3	0.5

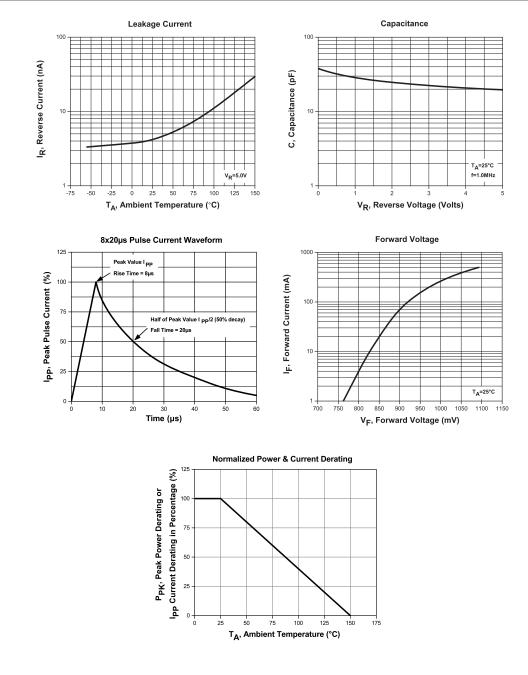
Note 1: Transmission Line Pulse (TLP) conditions:  $Z_0=50\Omega$ , tp=100ns

R0 (28-October 2016)

# **CPZ36R-CMATVS5V0** Typical Electrical Characteristics



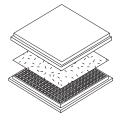
www.centralsemi.com



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# BARE DIE PACKING OPTIONS



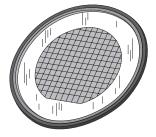


## BARE DIE IN TRAY (WAFFLE) PACK

- 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-<u>PART NUMBER</u>-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

## **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

#### **DESIGNER SUPPORT/SERVICES**

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

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities

ss your design challenges.

· Custom product packing

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits

Custom bar coding for shipments

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).
- 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**

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