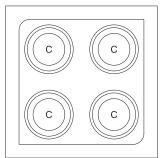


CPZ39R-CMNTVS5V0

4-Line Uni-Directional TVS Array Die 5.0 Volt

The CPZ39R-CMNTVS5V0 is a silicon, 4-line uni-directional transient voltage suppressor array designed to protect sensitive equipment against ESD damage.



BACKSIDE ANODE

MECHANICAL SPECIFICATIONS:

Die Size	11 x 11 MILS
Die Thickness	3.9 MILS
Cathode Bonding Pad Size (x4)	3.5 MILS DIAMETER
Top Side Metalization	AI – 30,000Å
Back Side Metalization	Au – 9,000Å
Scribe Alley Width	1.97 MILS
Wafer Diameter	5 INCHES
Gross Die Per Wafer	140,490

MAXIMUM RATINGS: (T _A =25°C)	SYMBOL		UNITS
Peak Power Dissipation (8x20µs)	P_{PK}	25	W
Electrical Fast Transient (IEC 61000-4-4) (5x50ns)	EFT	40	Α
ESD Voltage (IEC 61000-4-2, Air)	V_{ESD}	15	kV
ESD Voltage (IEC 61000-4-2, Contact)	V_{ESD}	15	kV
Operating and Storage Junction Temperature	T _J , T _{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS PER TVS: $(T_A=25^{\circ}C) V_F=1.2V MAX @ 10mA$

Maximum Reverse Stand-Off Voltage V _{RWM}	Reverse Reverse Breakdown Voltage		Reverse Leakage Current IR @ VRWM VC @ IPP		Typical TLP Clamping Voltage (Note 1) V _{CL} @ I _{PP}		Typical Dynamic Resistance (Note 1) RDYN	Junction Capacitance @ 0V Bias		Typical Junction Capacitance @ 3.3V Bias C _J			
٧	MIN V	NOM V	MAX V	TYP nA	MAX nA	٧	Α	V	Α	Ω	TYP pF	MAX pF	pF
5.0	6.0	7.1	8.0	F 0	250	12.5	2.0	12	4.3	1.45	9.5	10	5.5
5.0	6.0	'.1 '	0.0 5.0	5.0	5.0 250	12.5	2.0	20	9.8	1.45			

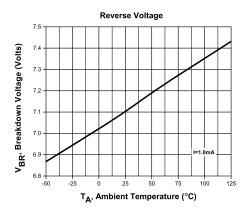
Note 1: Transmission Line Pulse (TLP) conditions: $Z_0=50\Omega$, tp=100ns

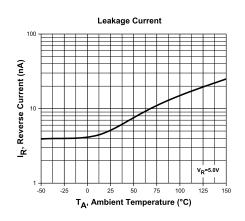
CPZ39R-CMNTVS5V0

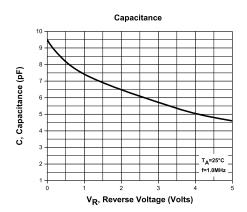
Typical Electrical Characteristics

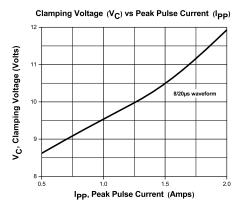


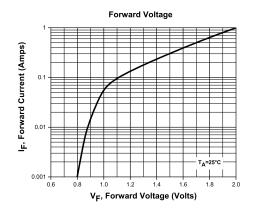
www.centralsemi.com

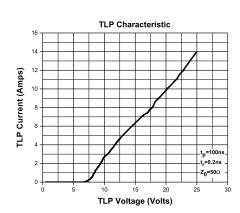












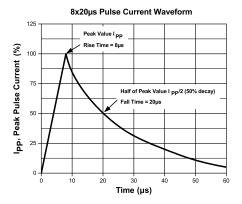
R0 (17-February 2017)

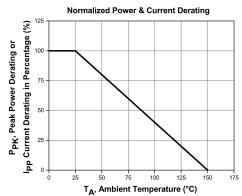
CPZ39R-CMNTVS5V0

Typical Electrical Characteristics



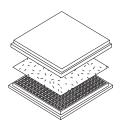
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BARE DIE PACKING OPTIONS

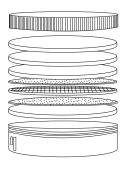




BARE DIE IN TRAY (WAFFLE) PACK

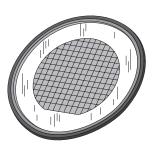
CT: Singulated die in tray (waffle) pack. (example: CP211-PART NUMBER-CT)

CM: Singulated die in tray (waffle) pack 100% visually inspected as per MIL-STD-750, (method 2072 transistors, method 2073 diodes). (example: CP211-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 guick 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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