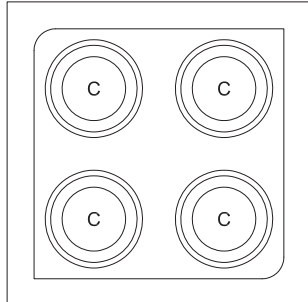


CPZ39R-CMNTVS5V0

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 R0

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	Al – 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	A
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

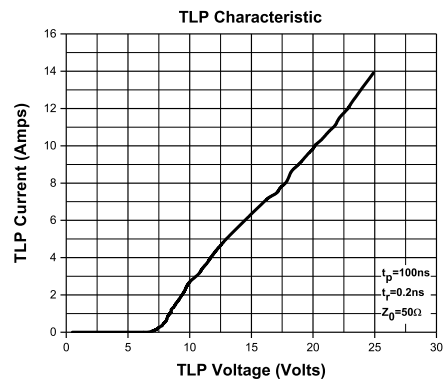
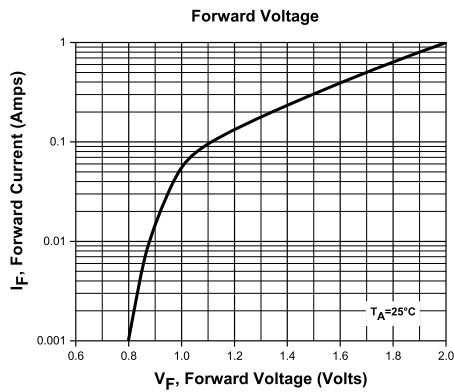
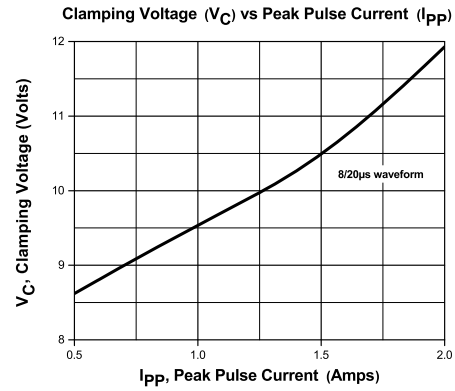
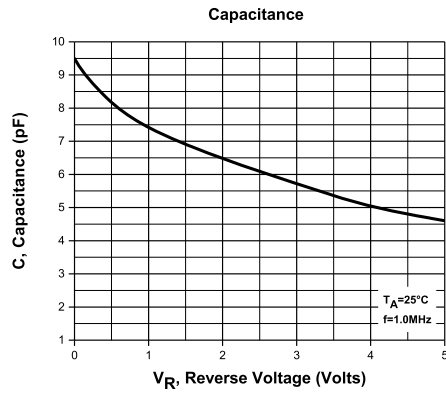
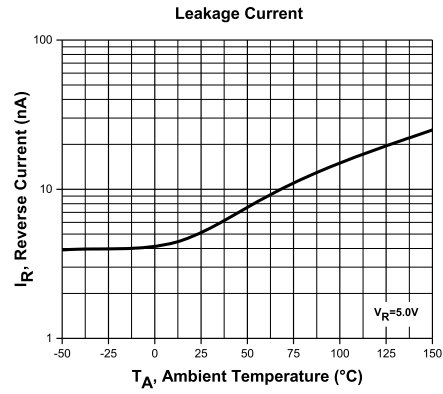
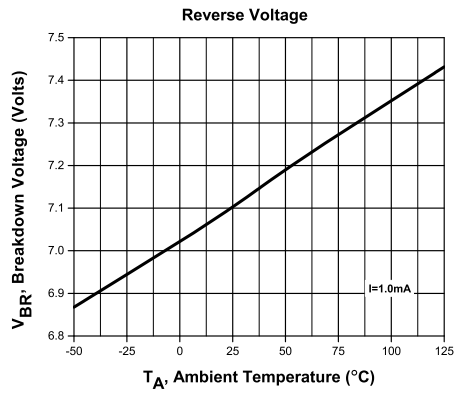
ELECTRICAL CHARACTERISTICS PER TVS: (T_A=25°C) V_F=1.2V MAX @ 10mA

Maximum Reverse Stand-Off Voltage V _{RWM}	Reverse Breakdown Voltage V _{BR} @ 1.0mA			Reverse Leakage Current I _R @ V _{RWM}		Maximum Clamping Voltage (8x20µs) V _C @ I _{PP}		Typical TLP Clamping Voltage (Note 1) V _{CL} @ I _{PP}		Typical Dynamic Resistance (Note 1) R _{DYN}	Junction Capacitance @ 0V Bias C _J		Typical Junction Capacitance @ 3.3V Bias C _J
	MIN V	NOM V	MAX V	TYP nA	MAX nA	V	A	V	A	Ω	TYP pF	MAX pF	pF
5.0	6.0	7.1	8.0	5.0	250	12.5	2.0	12	4.3	1.45	9.5	10	5.5
								20	9.8				

Note 1: Transmission Line Pulse (TLP) conditions: Z₀=50Ω, t_p=100ns

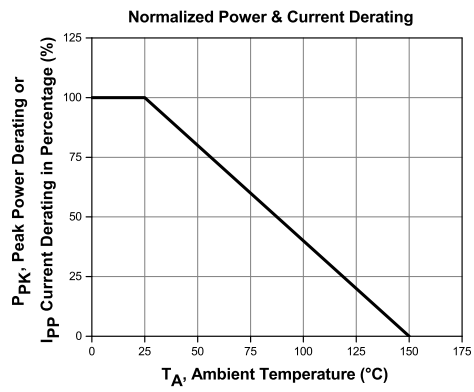
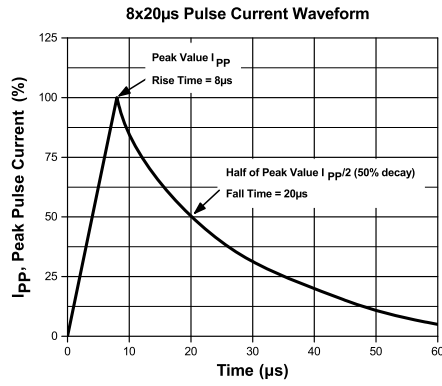
CPZ39R-CMNTVS5V0

Typical Electrical Characteristics



CPZ39R-CMNTVS5V0

Typical Electrical Characteristics



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

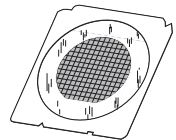
WN: Full wafer, unsawn, 100% tested with reject die inked.
(example: CP211-PART NUMBER-WN)



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).

CONTACT US

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