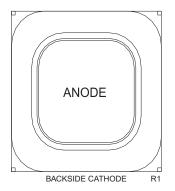


## CPD48V-CMPSH-3

Schottky Diode Die 0.1 Amp, 30 Volt

The CPD48V-CMPSH-3 is a silicon 0.1 Amp, 30 Volt Schottky diode designed for fast switching applications.



## **MECHANICAL SPECIFICATIONS:**

Die Size	13.8 x 13.8 MILS
Die Thickness	7.1 MILS
Anode Bonding Pad Size	9.0 x 9.0 MILS
Top Side Metalization	AI – 30,000Å
Back Side Metalization	Au – 9,000Å
Scribe Alley Width	2.4 MILS
Wafer Diameter	5 INCHES
Gross Die Per Wafer	90,246

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	30	V
Continuous Forward Current	I <sub>F</sub>	100	mA
Peak Repetitive Forward Current	I <sub>FRM</sub>	350	mA
Peak Forward Surge Current, tp=10ms	I <sub>FSM</sub>	750	mA
Operating and Storage Junction Temperature	T <sub>I</sub> , T <sub>eta</sub>	-65 to +150	°C

## **ELECTRICAL CHARACTERISTICS:** (T<sub>A</sub>=25°C unless otherwise noted)

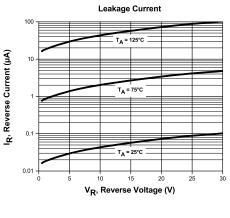
SYMBOL I <sub>R</sub>	TEST CONDITIONS VR=25V	MIN	<b>MAX</b> 500	<b>UNITS</b> nA
$BV_R$	I <sub>R</sub> =100μA	30		V
$V_{F}$	I <sub>F</sub> =2.0mA		0.33	V
$V_{F}$	I <sub>F</sub> =15mA		0.45	V
$V_{F}$	I <sub>F</sub> =100mA		1.0	V
CJ	$V_R=0$ , f=1.0MHz		20	pF
trr	$I_{\text{F}} = I_{\text{D}} = 10 \text{mA}$ . $I_{\text{rr}} = 1.0 \text{mA}$ . $R_{\text{I}} = 100 \Omega$		5.0	ns

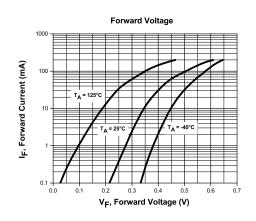
# CPD48V-CMPSH-3

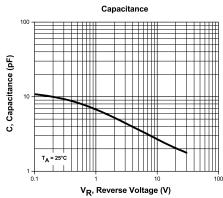
## **Typical Electrical Characteristics**

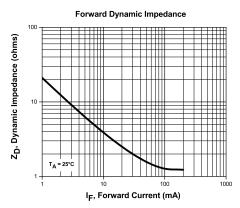


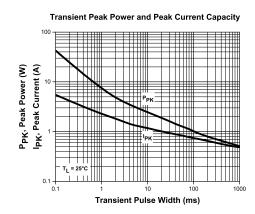
www.centralsemi.com

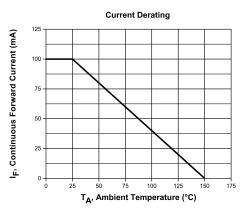








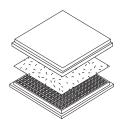




R1 (14-November 2017)

### BARE DIE PACKING OPTIONS

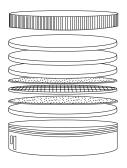




## BARE DIE IN TRAY (WAFFLE) PACK

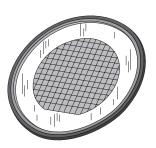
CT: Singulated die in tray (waffle) pack.
(example: CP211-PART NUMBER-CT)

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

### **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 (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

- 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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