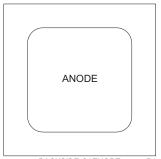


# CPD24-CMR1F-06M

## Fast Rectifier Die 1.0 Amp, 600 Volt

The CPD24-CMR1F-06M is a silicon 1.0 Amp, 600 Volt fast recovery rectifier ideal for all types of commercial, industrial, entertainment, and computer applications.



## **MECHANICAL SPECIFICATIONS:**

Die Size	50.5 x 50.5 MILS
Die Thickness	11 MILS
Anode Bonding Pad Size	33.8 x 33.8 MILS
Top Side Metalization	Ni/Au – 4,500Å/1,350Å
Back Side Metalization	Ni/Au – 4,500Å/1,350Å
Scribe Alley Width	2.0 MILS
Wafer Diameter	4 INCHES
Gross Die Per Wafer	4,250

<b>BACKSIDE</b>	CATHODE	R1
-----------------	---------	----

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	600	V
DC Blocking Voltage	$V_{R}$	600	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	420	V
Average Forward Current (T <sub>A</sub> =120°C)	Îo	1.0	Α
Peak Forward Surge Current, tp=8.3ms	I <sub>FSM</sub>	30	Α
Operating and Storage Junction Temperature	$T_{.l}, T_{sta}$	-65 to +150	°C

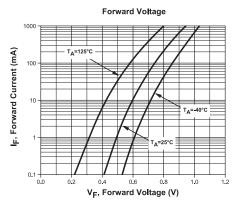
ELECTRICAL CHARACTERISTICS: (T <sub>A</sub> =25°C unless otherwise)						
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS		
$I_{R}$	V <sub>R</sub> =600V		5.0	μΑ		
$V_{F}$	I <sub>F</sub> =1.0A		1.3	V		
CJ	$V_R$ =0, f=1.0MHz		35	pF		
t <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>rr</sub> =0.25A		250	ns		

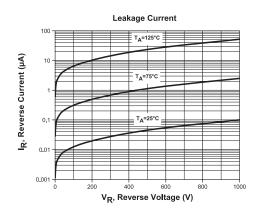
# CPD24-CMR1F-06M

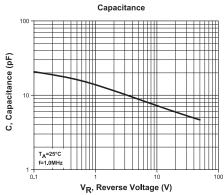
## **Typical Electrical Characteristics**

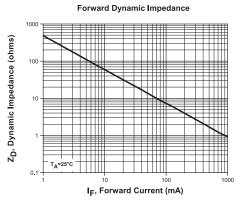


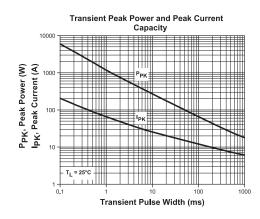
www.centralsemi.com

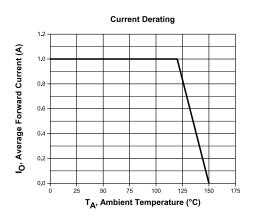






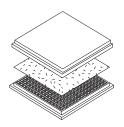






## BARE DIE PACKING OPTIONS

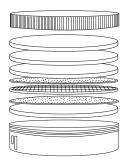




## BARE DIE IN TRAY (WAFFLE) PACK

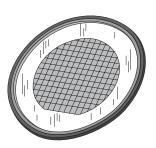
CT: Singulated die in tray (waffle) pack. (example: CP211-PART NUMBER-CT)

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 (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**

### Corporate Headquarters & Customer Support Team

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA

Main Tel: (631) 435-1110 Main Fax: (631) 435-1824

Support Team Fax: (631) 435-3388

www.centralsemi.com

Worldwide Field Representatives: <a href="https://www.centralsemi.com/wwreps">www.centralsemi.com/wwreps</a>

**Worldwide Distributors:** 

www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: <a href="https://www.centralsemi.com/terms">www.centralsemi.com/terms</a>

www.centralsemi.com (001)