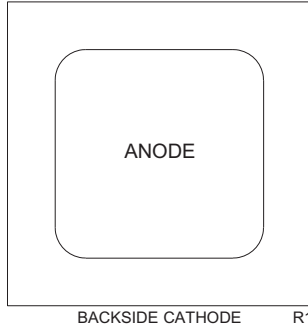


# CPD24-CMR1F-04M

## Fast Rectifier Die

### 1.0 Amp, 400 Volt

The CPD24-CMR1F-04M is a silicon 1.0 Amp, 400 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

#### MAXIMUM RATINGS: ( $T_A=25^{\circ}\text{C}$ )

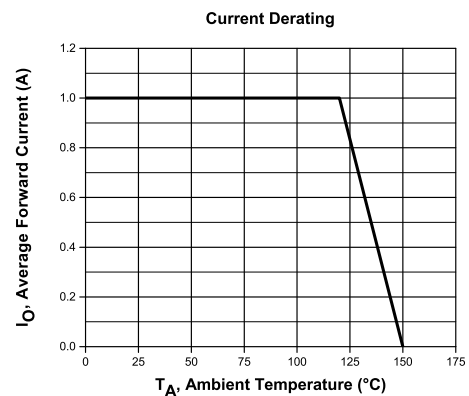
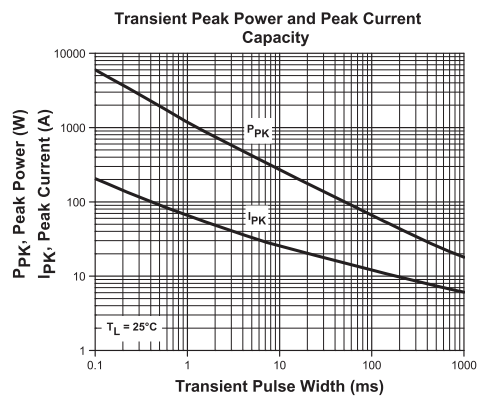
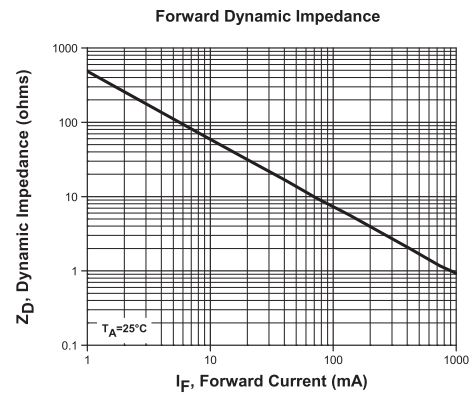
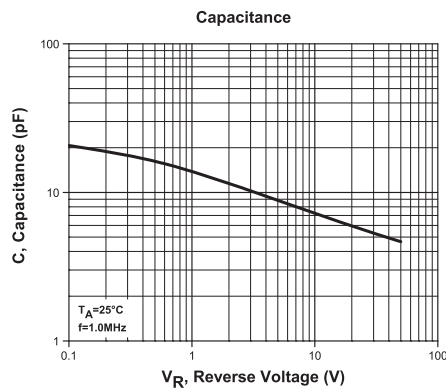
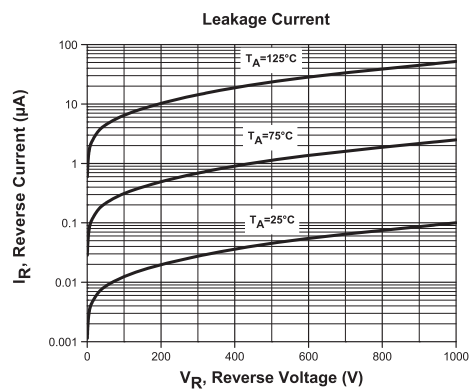
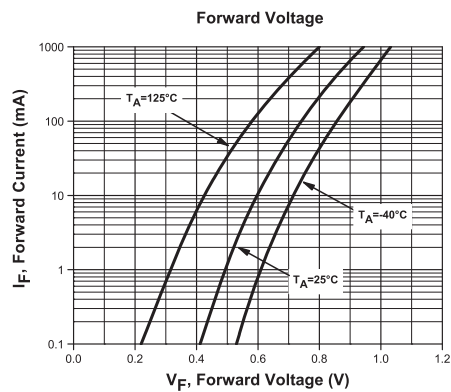
	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	400	V
DC Blocking Voltage	$V_R$	400	V
RMS Reverse Voltage	$V_{R(RMS)}$	280	V
Average Forward Current ( $T_A=120^{\circ}\text{C}$ )	$I_O$	1.0	A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	$I_{FSM}$	30	A
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^{\circ}\text{C}$

#### ELECTRICAL CHARACTERISTICS: ( $T_A=25^{\circ}\text{C}$ unless otherwise)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_R$	$V_R=400\text{V}$		5.0	$\mu\text{A}$
$V_F$	$I_F=1.0\text{A}$		1.3	V
$C_J$	$V_R=0, f=1.0\text{MHz}$		35	pF
$t_{rr}$	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$		150	ns

# CPD24-CMR1F-04M

## Typical Electrical Characteristics



## BARE DIE PACKING OPTIONS

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### 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)

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### UNSAWN WAFER

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

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### 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](http://www.centrasemi.com/bdspecs)**

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### 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
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### 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).

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### CONTACT US

#### Corporate Headquarters & Customer Support Team

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Main Fax: (631) 435-1824  
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[www.centrasemi.com](http://www.centrasemi.com)

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