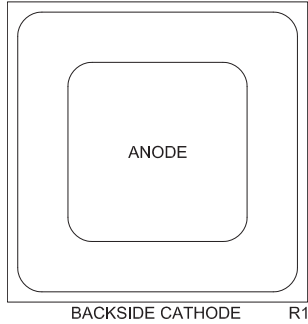


# CPD69-1N4006

## General Purpose Rectifier Die

### 1.0 Amp, 800 Volt

The CPD69-1N4006 is a silicon 1.0 Amp, 800 Volt general purpose rectifier ideal for all types of commercial, industrial, entertainment, and computer applications.



**MECHANICAL SPECIFICATIONS:**

|                        |                       |
|------------------------|-----------------------|
| Die Size               | 42.5 x 42.5 MILS      |
| Die Thickness          | 11.0 MILS             |
| Anode Bonding Pad Size | 24 x 24 MILS          |
| Top Side Metalization  | Ni/Au – 5,000Å/1,350Å |
| Back Side Metalization | Ni/Au – 5,000Å/1,350Å |
| Scribe Alley Width     | 2.76 MILS             |
| Wafer Diameter         | 4 INCHES              |
| Gross Die Per Wafer    | 5,915                 |

**MAXIMUM RATINGS:** (T<sub>A</sub>=25°C)

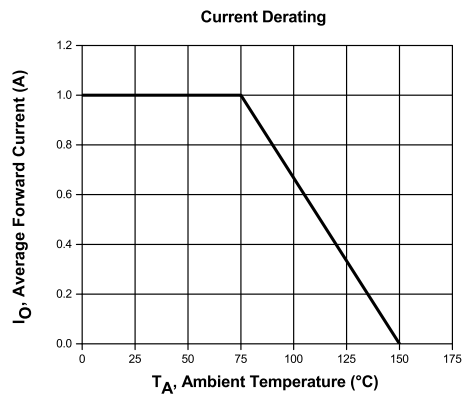
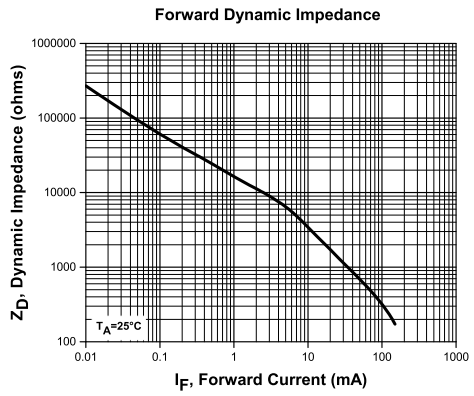
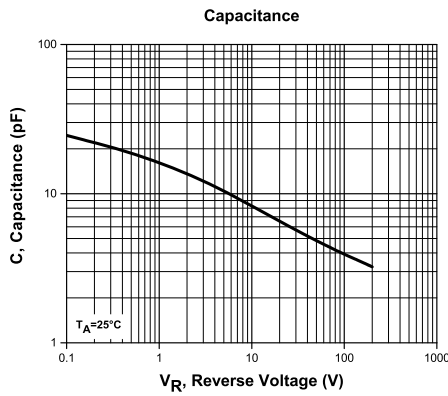
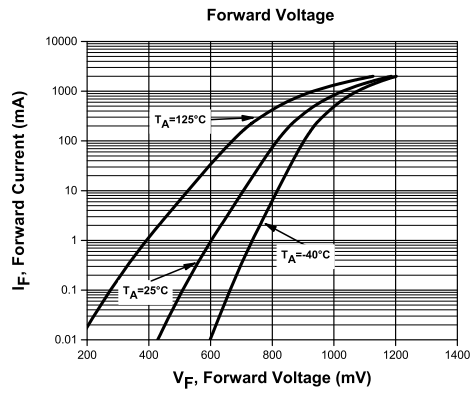
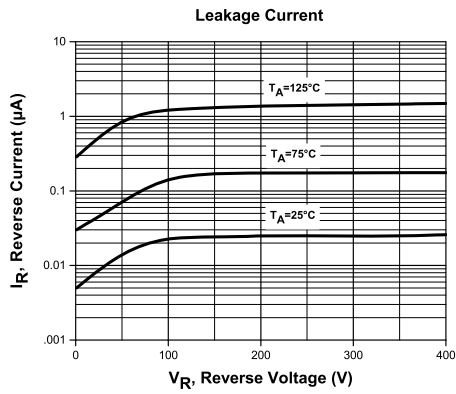
|  | SYMBOL                            |             | UNITS |
|--|-----------------------------------|-------------|-------|
| Peak Repetitive Reverse Voltage                | V <sub>RRM</sub>                  | 800         | V     |
| DC Blocking Voltage                            | V <sub>R</sub>                    | 800         | V     |
| RMS Reverse Voltage                            | V <sub>R(RMS)</sub>               | 560         | V     |
| Average Forward Current (T <sub>A</sub> =75°C) | I <sub>O</sub>                    | 1.0         | A     |
| Peak Forward Surge Current, tp=8.3ms           | I <sub>FSM</sub>                  | 50          | A     |
| Operating and Storage Junction Temperature     | T <sub>J</sub> , T <sub>stg</sub> | -65 to +150 | °C    |

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

| SYMBOL         | TEST CONDITIONS             | MIN | MAX | UNITS |
|----------------|-----------------------------|-----|-----|-------|
| I <sub>R</sub> | V <sub>R</sub> =800V        |     | 5.0 | μA    |
| V <sub>F</sub> | I <sub>F</sub> =1.0A        |     | 1.1 | V     |
| C <sub>J</sub> | V <sub>R</sub> =0, f=1.0MHz |     | 40  | pF    |

# CPD69-1N4006

## 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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