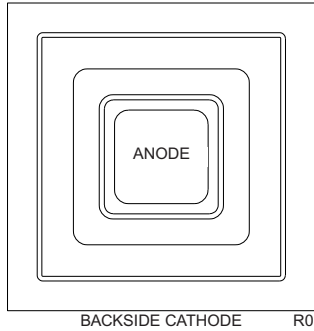


The CPD91V-CMPD6001 is a silicon epitaxial planar diode designed for switching applications requiring extremely low leakage.



MECHANICAL SPECIFICATIONS:

| | |
|------------------------|------------------|
| Die Size | 11 x 11 MILS |
| Die Thickness | 7.1 MILS |
| Anode Bonding Pad Size | 3.35 x 3.35 MILS |
| Top Side Metalization | Al - 15,000Å |
| Back Side Metalization | Au-As - 9,000Å |
| Scribe Alley Width | 2.2 MILS |
| Wafer Diameter | 5 INCHES |
| Gross Die Per Wafer | 137,880 |

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

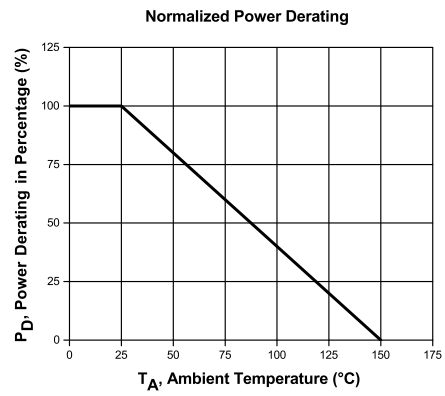
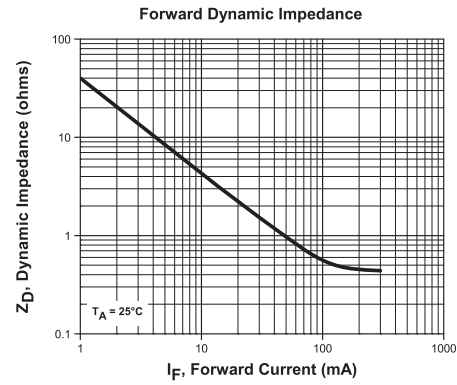
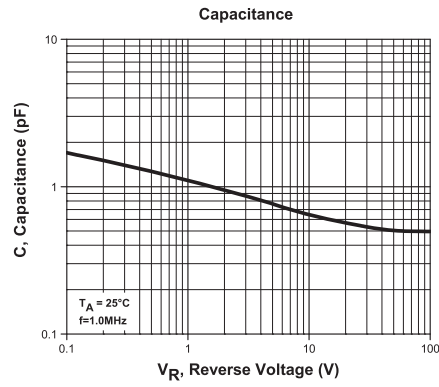
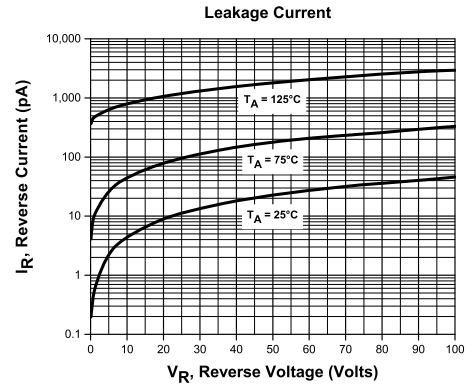
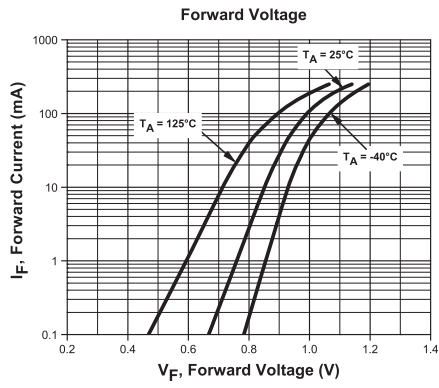
| | SYMBOL | | UNITS |
|--------------------------------------------------|----------------|-------------|------------------|
| Continuous Reverse Voltage | V_R | 75 | V |
| Peak Repetitive Reverse Voltage | V_{RRM} | 100 | V |
| Continuous Forward Current | I_F | 250 | mA |
| Peak Repetitive Forward Current | I_{FRM} | 250 | mA |
| Peak Forward Surge Current, $t_p=1.0\mu\text{s}$ | I_{FSM} | 4.0 | A |
| Peak Forward Surge Current, $t_p=1.0\text{s}$ | I_{FSM} | 1.0 | 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 noted)

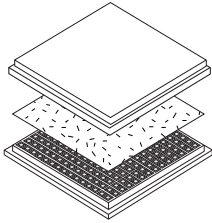
| SYMBOL | TEST CONDITIONS | MIN | MAX | UNITS |
|---------------|-----------------------------------------------------------|------------|------------|---------------|
| I_R | $V_R=75\text{V}$ | | 500 | pA |
| BV_R | $I_R=100\mu\text{A}$ | 100 | | V |
| V_F | $I_F=1.0\text{mA}$ | | 0.85 | V |
| V_F | $I_F=10\text{mA}$ | | 0.95 | V |
| V_F | $I_F=100\text{mA}$ | | 1.1 | V |
| C_J | $V_R=0, f=1.0\text{MHz}$ | | 2.0 | pF |
| t_{rr} | $I_R=I_F=10\text{mA}, I_{rr}=1.0\text{mA}, R_L=100\Omega$ | | 3.0 | μs |

CPD91V-CMPD6001

Typical Electrical Characteristics



BARE DIE PACKING OPTIONS



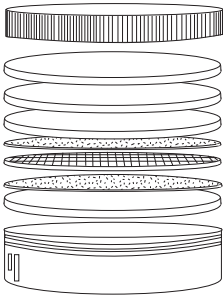
BARE DIE IN TRAY (WAFFLE) PACK

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).

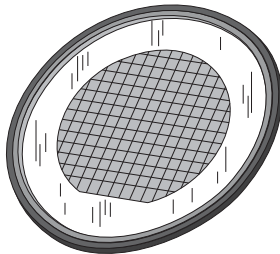
(example: CP211-PART NUMBER-CM)



UNSAWN WAFER

WN: Full wafer, unsawn, 100% tested with reject die inked.

(example: CP211-PART NUMBER-WN)

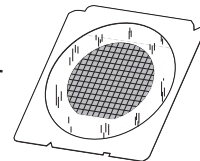


SAWN WAFER ON PLASTIC RING

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.



R1 (10-February 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 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

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