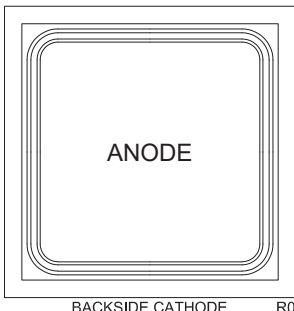


CPD112R-CFSH05-20L

Schottky Diode Die

0.5 Amp, 20 Volt

The CPD112R-CFSH05-20L is a silicon Schottky diode designed for applications where energy efficiency is a prime requirement.



MECHANICAL SPECIFICATIONS:

Die Size	15 x 15 MILS
Die Thickness	3.9 MILS
Anode Bonding Pad Size	12.6 x 12.6 MILS
Top Side Metalization	Al – 20,000Å
Back Side Metalization	Ti/Ni/Ag – 1,000Å/3,000Å/10,000Å
Scribe Alley Width	1.57 MILS
Wafer Diameter	6 INCHES
Gross Die Per Wafer	109,270

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

Peak Repetitive Reverse Voltage

SYMBOL

V_{RRM}

20

UNITS

V

DC Blocking Voltage

V_R

20

V

Average Forward Current

I_O

500

mA

Peak Forward Surge Current, $t_p=8.3\text{ms}$

I_{FSM}

3.0

A

Operating and Storage Junction Temperature

T_J, T_{stg}

-65 to +150

$^{\circ}\text{C}$

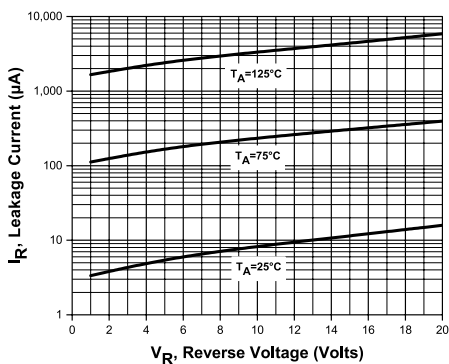
ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=10\text{V}$		30	μA
BV_R	$I_R=500\mu\text{A}$	20		V
V_F	$I_F=0.1\text{mA}$		180	mV
V_F	$I_F=1.0\text{mA}$		240	mV
V_F	$I_F=10\text{mA}$		290	mV
V_F	$I_F=100\text{mA}$		380	mV
V_F	$I_F=500\text{mA}$		500	mV
C_J	$V_R=1.0\text{V}, f=1.0\text{MHz}$		30	pF

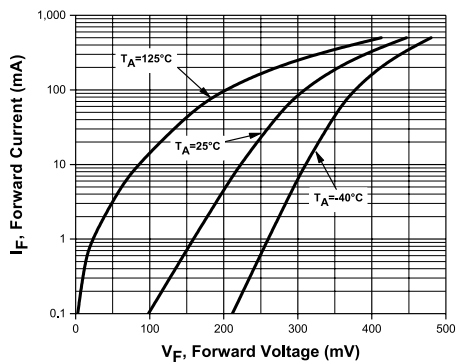
CPD112R-CFSH05-20L

Typical Electrical Characteristics

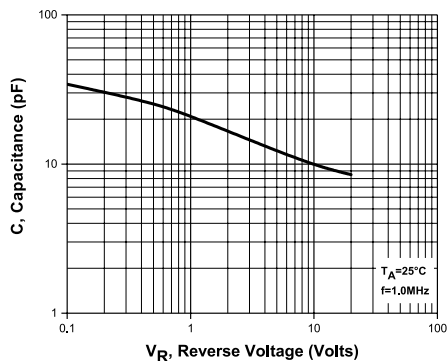
Leakage Current



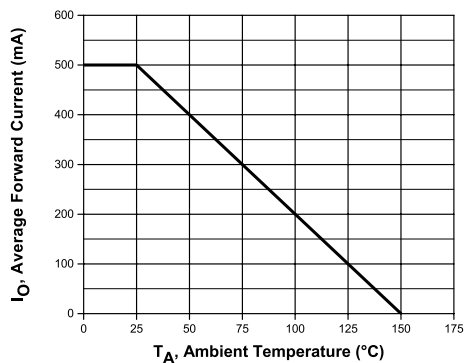
Forward Voltage



Capacitance



Current Derating



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

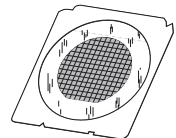
WN: Full wafer, unsawn, 100% tested with reject die inked.
(example: CP211-PART NUMBER-WN)



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.centrasemi.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 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

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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