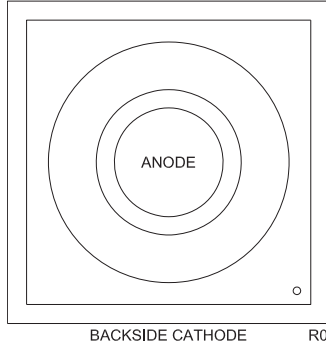


CPD66X-1N3595

Low Leakage Diode Die

0.15 Amp, 150 Volt

The CPD66X-1N3595 is a silicon 0.15 Amp, 150 Volt diode designed for low leakage applications.



MECHANICAL SPECIFICATIONS:

Die Size	17.5 x 17.5 MILS
Die Thickness	5.9 MILS
Anode Bonding Pad Size	7.0 MILS DIAMETER
Top Side Metalization	Al – 30,000Å
Back Side Metalization	Au-As – 9,000Å
Scribe Alley Width	2.0 MILS
Wafer Diameter	5 INCHES
Gross Die Per Wafer	54,848

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V _{RRM}	150	V
Peak Working Reverse Voltage	V _{RWM}	125	V
Average Forward Current	I _O	150	mA
Continuous Forward Current	I _F	225	mA
Peak Repetitive Forward Current	I _{FRM}	600	mA
Peak Forward Surge Current, t _p =1.0μs	I _{FSM}	500	mA
Peak Forward Surge Current, t _p =1.0s	I _{FSM}	4.0	A
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C

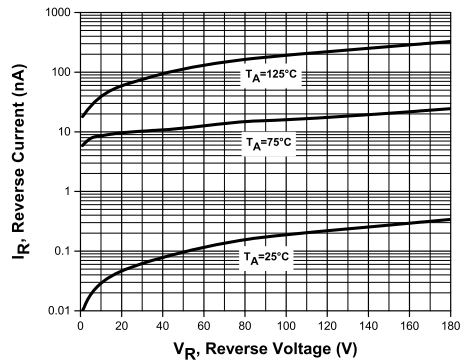
ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _R	V _R =125V		1.0	nA
BV _R	I _R =100μA	150		V
V _F	I _F =1.0mA	0.54	0.69	V
V _F	I _F =5.0mA	0.62	0.77	V
V _F	I _F =10mA	0.65	0.80	V
V _F	I _F =50mA	0.75	0.88	V
V _F	I _F =100mA	0.79	0.92	V
V _F	I _F =200mA	0.83	1.0	V
C _J	V _R =0, f=1.0MHz		8.0	pF
t _{rr}	V _R =3.5V, I _F =10mA, R _L =1.0kΩ		3.0	μs

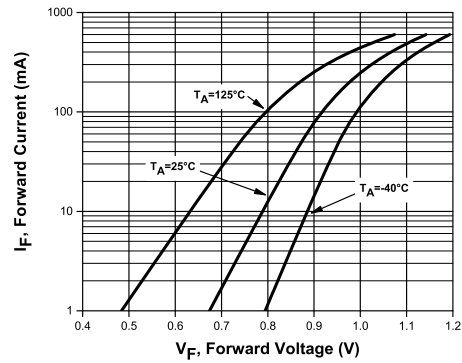
CPD66X-1N3595

Typical Electrical Characteristics

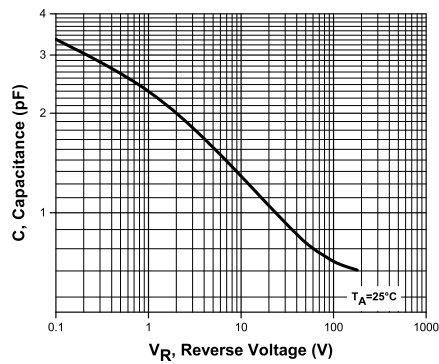
Leakage Current



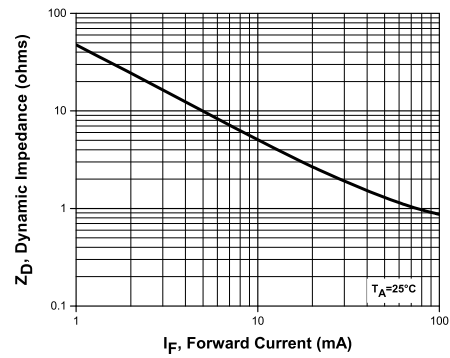
Forward Voltage



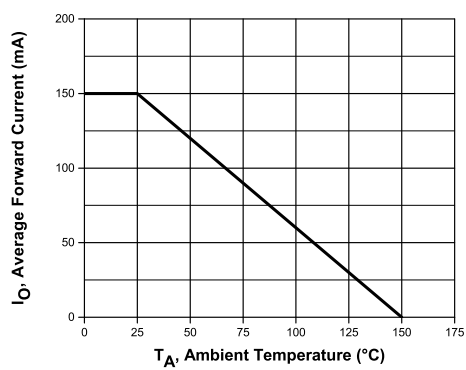
Capacitance



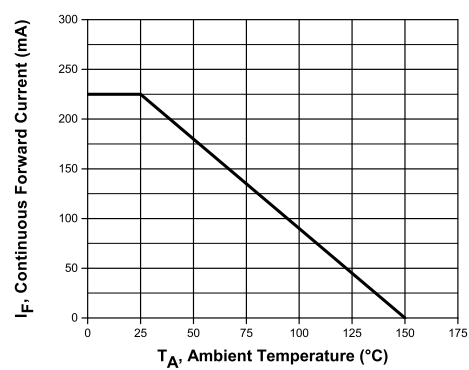
Forward Dynamic Impedance



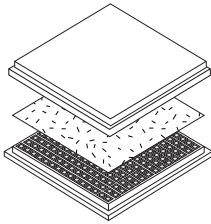
Current Derating



Current Derating



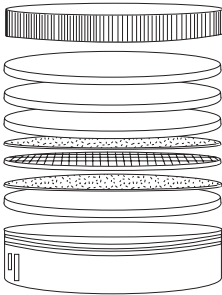
BARE DIE PACKING OPTIONS



BARE DIE IN TRAY (WAFFLE) PACK

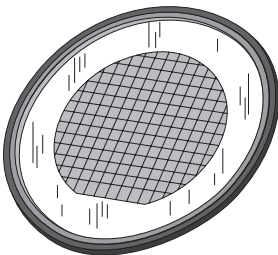
CT: Singulated die in tray (waffle) pack.
(example: CP211-PART NUMBER-CT)

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

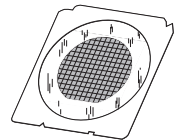
WN: Full wafer, unsawn, 100% tested with reject die inked.
(example: CP211-PART NUMBER-WN)



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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