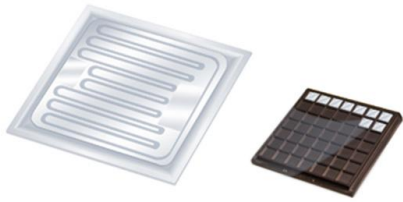


CPD76X-1N5817-CT20 Datasheet

www.digi-electronics.com



DiGi Electronics Part Number	CPD76X-1N5817-CT20-DG
Manufacturer	Central Semiconductor Corp
Manufacturer Product Number	CPD76X-1N5817-CT20
Description	DIODE SCHOTTKY 20V 1A DIE 1=20
Detailed Description	Diode 20 V 1A Surface Mount Die

<https://www.DiGi-Electronics.com>

This model CPD76X-1N5817-CT20 is available at DiGi Electronics.

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Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

CPD76X-1N5817-CT20

Series:

-

Technology:

Schottky

Current - Average Rectified (Io):

1A

Speed:

Fast Recovery =< 500ns, > 200mA (Io)

Capacitance @ Vr, F:

-

Package / Case:

Die

Operating Temperature - Junction:

-65°C ~ 150°C

Manufacturer:

Central Semiconductor Corp

Product Status:

Active

Voltage - DC Reverse (Vr) (Max):

20 V

Voltage - Forward (Vf) (Max) @ If:

450 mV @ 1 A

Current - Reverse Leakage @ Vr:

1 mA @ 20 V

Mounting Type:

Surface Mount

Supplier Device Package:

Die

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8541.10.0080

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

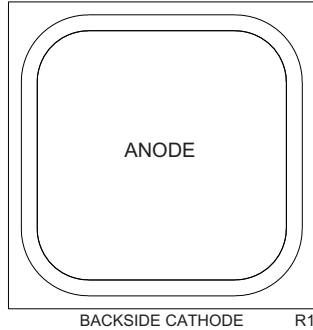


CPD76X-1N5817

Schottky Rectifier Die

1.0 Amp, 20 Volt

The CPD76X-1N5817 is a silicon 1.0 Amp, 20 Volt Schottky rectifier ideal for all types of commercial, industrial, entertainment, and computer applications.



MECHANICAL SPECIFICATIONS:

Die Size	32 x 32 MILS
Die Thickness	5.9 MILS
Anode Bonding Pad Size	27 x 27 MILS
Top Side Metalization	Al – 20,000Å
Back Side Metalization	Au – 9,000Å
Scribe Alley Width	2.36 MILS
Wafer Diameter	5 INCHES
Gross Die Per Wafer	16,276

MAXIMUM RATINGS: ($T_A=25^{\circ}\text{C}$)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	20	V
DC Blocking Voltage	V_R	20	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	V
Average Forward Current ($T_A=100^{\circ}\text{C}$)	I_O	1.0	A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	I_{FSM}	25	A
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^{\circ}\text{C}$

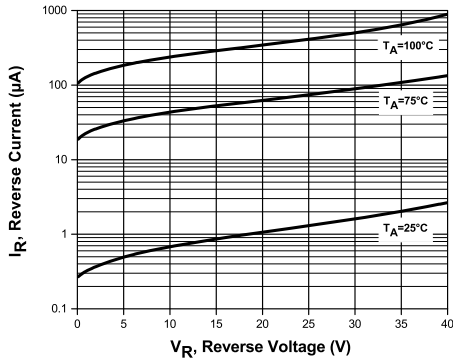
ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$ unless otherwise)				
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=20\text{V}$		1.0	mA
V_F	$I_F=0.1\text{A}$		320	mV
V_F	$I_F=1.0\text{A}$		450	mV
V_F	$I_F=3.1\text{A}$		750	mV
C_J	$V_R=0, f=1.0\text{MHz}$		300	pF

CPD76X-1N5817

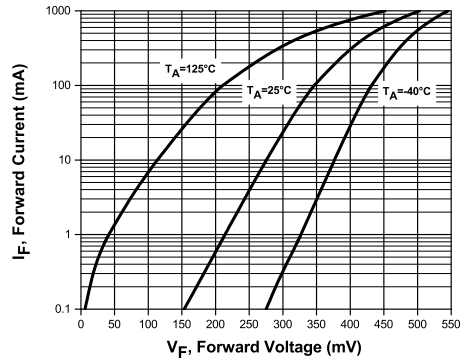
Typical Electrical Characteristics



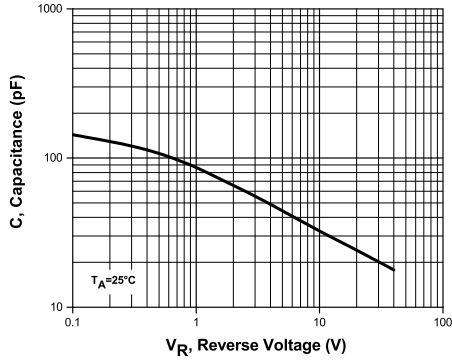
Leakage Current



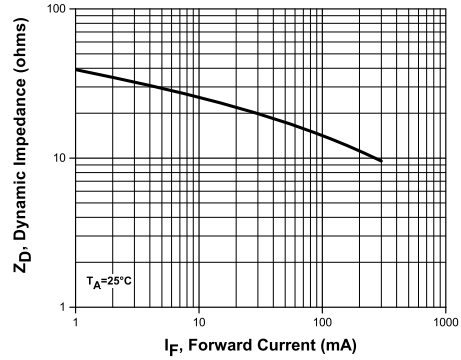
Forward Voltage



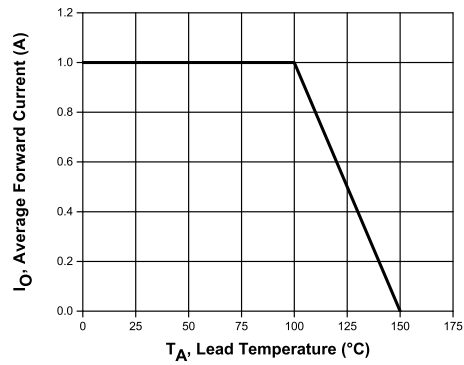
Capacitance



Forward Dynamic Impedance

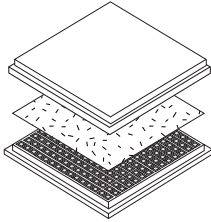


Current Derating





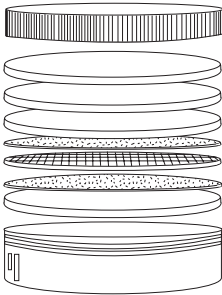
BARE DIE PACKING OPTIONS



BARE DIE IN TRAY (WAFFLE) PACK

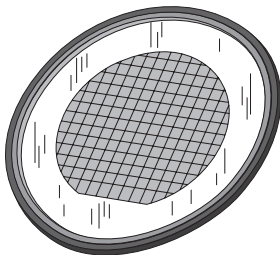
CT: Singulated die in tray (waffle) pack.
(example: CP211-PART NUMBER-CT)

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

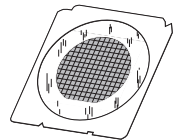
WN: Full wafer, unsawn, 100% tested with reject die inked.
(example: CP211-PART NUMBER-WN)



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).

CONTACT US

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