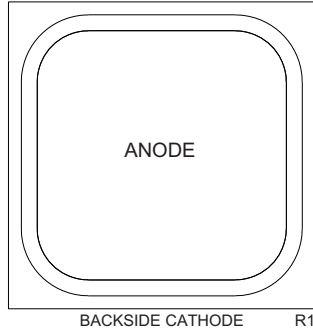


# CPD76X-1N5817

## 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

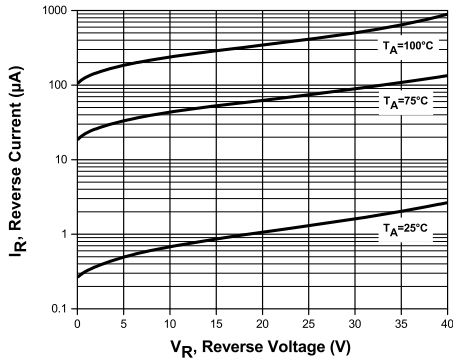
MAXIMUM RATINGS: ( $T_A=25^\circ\text{C}$ )	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	20	V
DC Blocking Voltage	$V_R$	20	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	V
Average Forward Current ( $T_A=100^\circ\text{C}$ )	$I_O$	1.0	A
Peak Forward Surge Current, $tp=8.3\text{ms}$	$I_{FSM}$	25	A
Operating 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

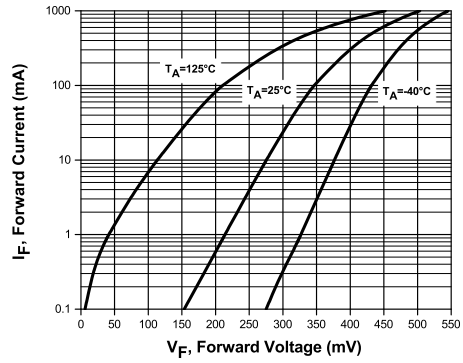
# CPD76X-1N5817

## Typical Electrical Characteristics

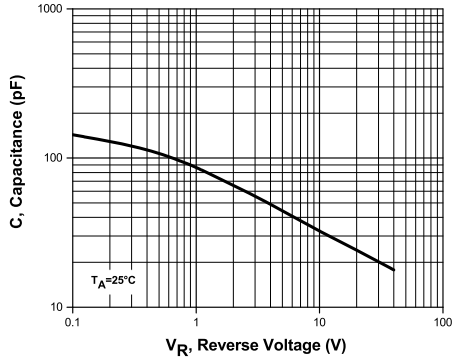
Leakage Current



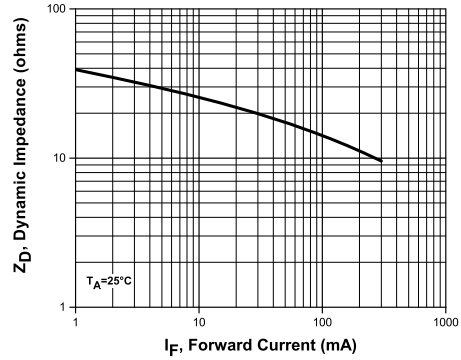
Forward Voltage



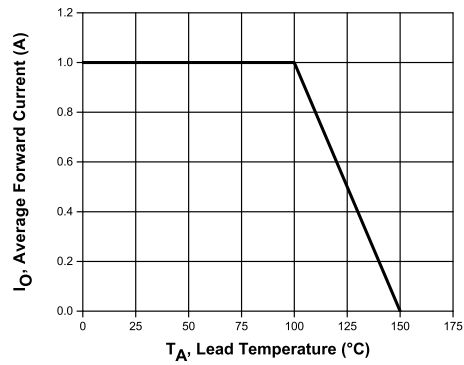
Capacitance



Forward Dynamic Impedance



Current Derating



## BARE DIE PACKING OPTIONS

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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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