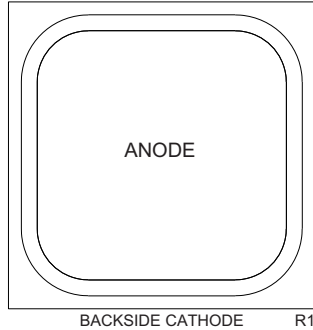


CPD76X-1N5817

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

Peak Repetitive Reverse Voltage
DC Blocking Voltage
RMS Reverse Voltage

Average Forward Current ($T_A=100^\circ\text{C}$)

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

Operating and Storage Junction Temperature

SYMBOL

V_{RRM}

V_R

$V_{R(RMS)}$

I_O

I_{FSM}

T_J, T_{stg}

20

20

14

1.0

25

-65 to +150

UNITS

V

V

V

A

A

$^\circ\text{C}$

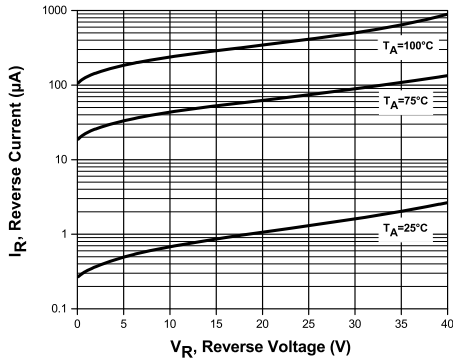
ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise)

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

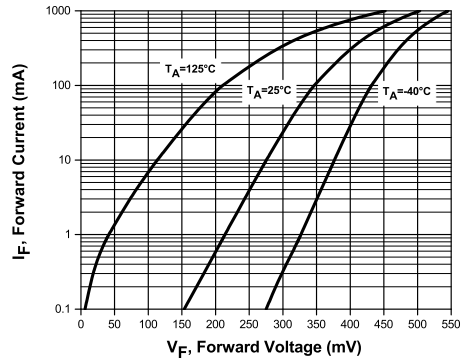
CPD76X-1N5817

Typical Electrical Characteristics

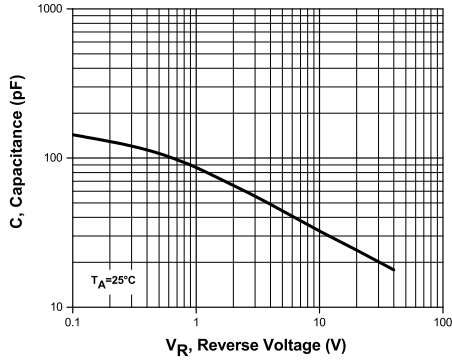
Leakage Current



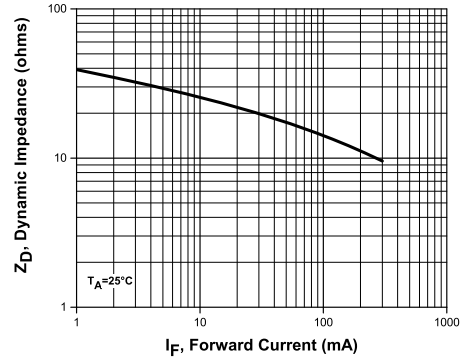
Forward Voltage



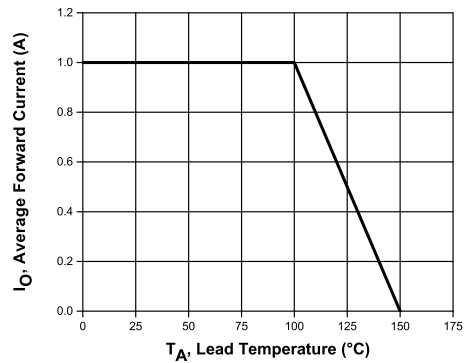
Capacitance



Forward Dynamic Impedance



Current Derating



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

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centrasemi.com/terms