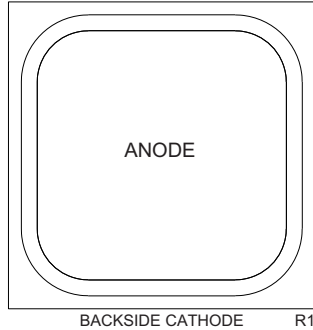


CPD76X-CMLSH1-40

Schottky Rectifier Die

1.0 Amp, 40 Volt

The CPD76X-CMLSH1-40 is a silicon 1.0 Amp, 40 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

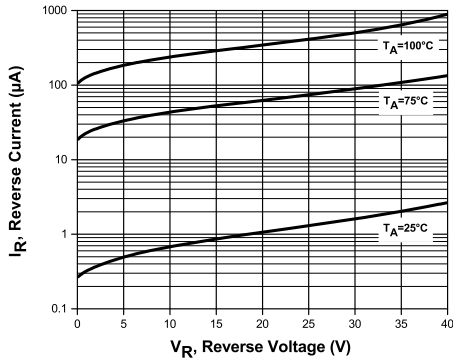
MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Continuous Forward Current	I_F	1.0	A
Peak Repetitive Forward Current, $t_p \leq 1.0\text{ms}$	I_{FRM}	3.5	A
Peak Forward Surge Current, $t_p = 8.3\text{ms}$	I_{FSM}	10	A
Operating and Storage Junction 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	TYP	MAX	UNITS
I_R	$V_R=5.0\text{V}$			10	μA
I_R	$V_R=8.0\text{V}$			20	μA
I_R	$V_R=15\text{V}$			50	μA
BV_R	$I_R=100\mu\text{A}$	40			V
V_F	$I_F=10\text{mA}$			290	mV
V_F	$I_F=100\text{mA}$			360	mV
V_F	$I_F=500\text{mA}$			450	mV
V_F	$I_F=1.0\text{A}$			550	mV
C_J	$V_R=0, f=1.0\text{MHz}$			300	pF
t_{rr}	$I_F=I_R=500\text{mA}, I_{rr}=50\text{mA}, R_L=50\Omega$		15		ns

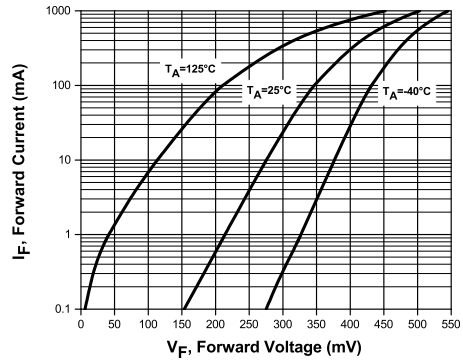
CPD76X-CMLSH1-40

Typical Electrical Characteristics

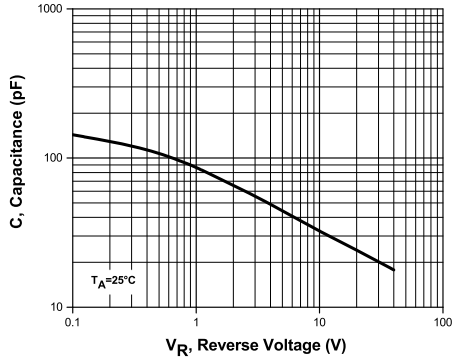
Leakage Current



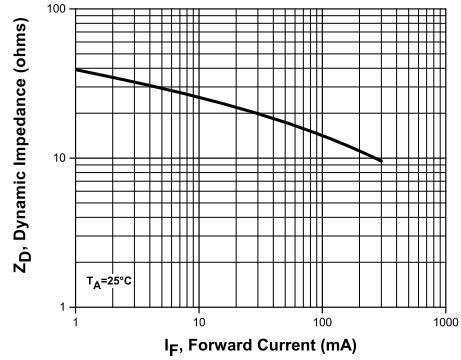
Forward Voltage



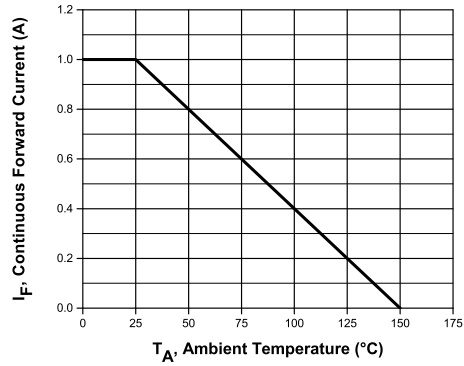
Capacitance



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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