

CPD32X

Schottky Rectifier Die

10 Amp, 40 Volt

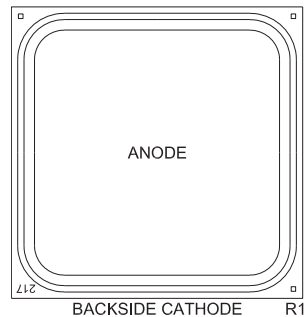
The CPD32X Schottky die is optimized for alternative energy applications. The 6 mil thick die provides an ultra low profile that is readily attached via standard die attach methods. Parametrically, the device is extremely energy efficient as a result of low forward and reverse conduction losses.

FEATURES:

- Low forward voltage at 10 Amps forward current
- Low reverse leakage current
- Low profile geometry
- Metalization suitable for standard die attach technologies
- Top metalization optimized for wire bonding

APPLICATIONS:

The CPD32X is optimized for use as a by-pass rectifier in low profile solar (PV) panels.



MECHANICAL SPECIFICATIONS:

Die Size	85.4 x 85.4 MILS
Die Thickness	5.9 MILS ± 0.79 MILS
Die Passivation	SiN
Anode Bonding Pad Size	78.3 x 78.3 MILS
Top Side Metalization	Al – 30,000Å
Back Side Metalization	Ti/Ni/Au – 1,500Å/5,500Å/1,500Å
Scribe Alley Width	3.15 MILS
Wafer Diameter	5 INCHES
Gross Die Per Wafer	2,260

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V _{RRM}	40	V
DC Blocking Voltage	V _R	40	V
Average Forward Current	I _O	10	A
Peak Forward Surge Current (tp=8.3ms)	I _{FSM}	250	A
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +150	°C

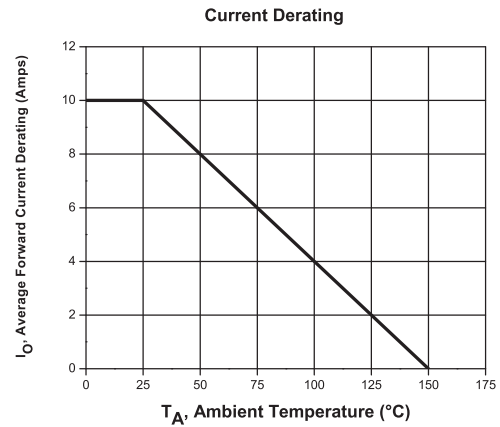
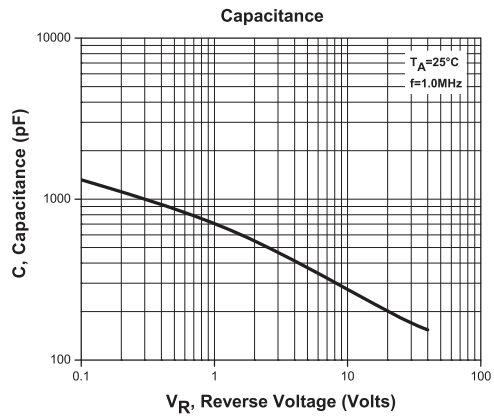
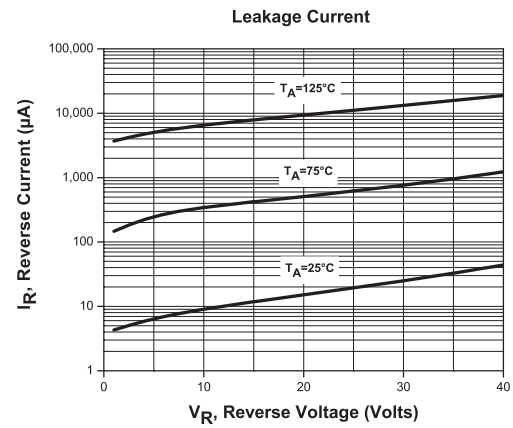
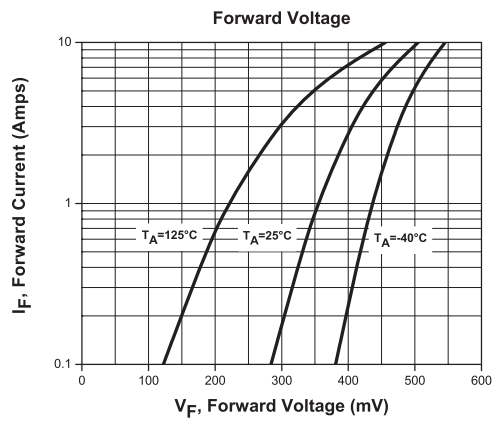
ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _R	V _R =10V		10	200	μA
I _R	V _R =40V		30	500	μA
I _R	V _R =40V, T _A =100°C		15	50	mA
BV _R	I _R =0.5mA	40			V
V _F	I _F =5.0A		0.43	0.48	V
V _F	I _F =10A		0.48	0.52	V

R4 (19-August 2019)

CPD32X

Typical Electrical Characteristics



R4 (19-August 2019)

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

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.centalsemi.com

Worldwide Field Representatives:
www.centalsemi.com/wwreps

Worldwide Distributors:
www.centalsemi.com/wwdistributors

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