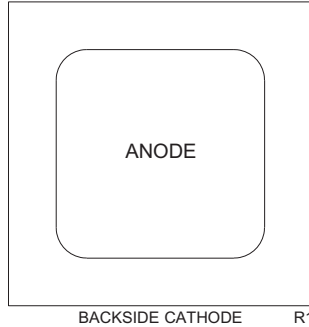


CPD24-1N4946

Fast Rectifier Die

1.0 Amp, 600 Volt

The CPD24-1N4946 is a silicon 1.0 Amp, 600 Volt fast recovery rectifier ideal for all types of commercial, industrial, entertainment, and computer applications.



MECHANICAL SPECIFICATIONS:

Die Size	50.5 x 50.5 MILS
Die Thickness	11 MILS
Anode Bonding Pad Size	33.8 x 33.8 MILS
Top Side Metalization	Ni/Au – 4,500Å/1,350Å
Back Side Metalization	Ni/Au – 4,500Å/1,350Å
Scribe Alley Width	2.0 MILS
Wafer Diameter	4 INCHES
Gross Die Per Wafer	4,250

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

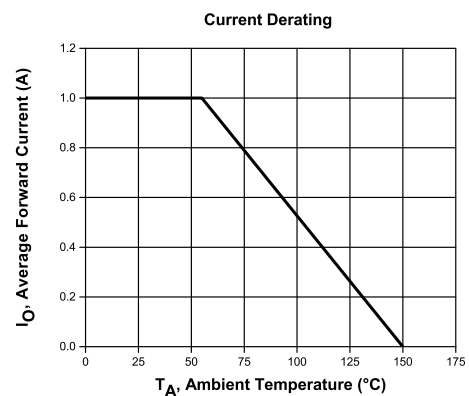
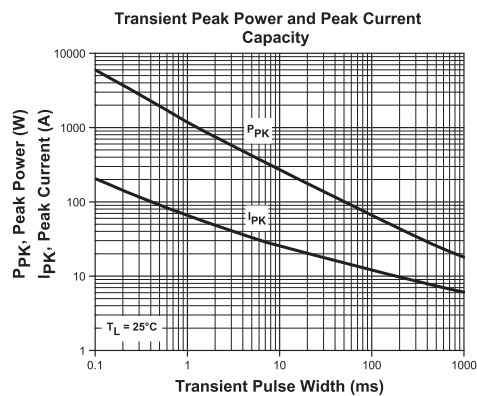
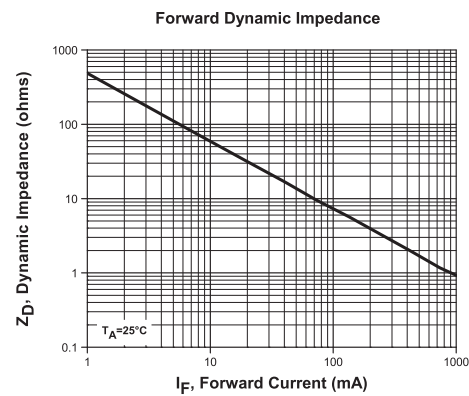
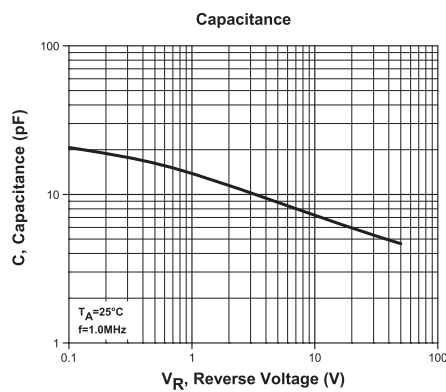
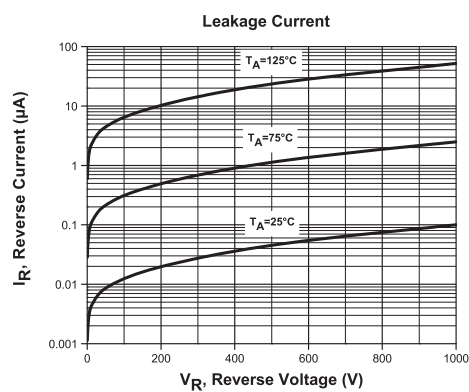
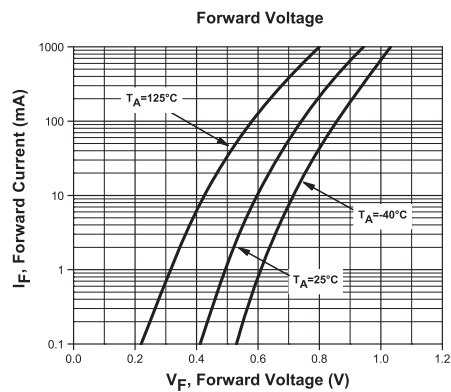
	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	600	V
DC Blocking Voltage	V_R	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	420	V
Average Forward Current ($T_A=55^{\circ}\text{C}$)	I_O	1.0	A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	I_{FSM}	50	A
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^{\circ}\text{C}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=600\text{V}$		1.0	μA
V_F	$I_F=1.0\text{A}$		1.3	V
C_J	$V_R=12\text{V}, f=1.0\text{MHz}$		45	pF
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$		250	ns

CPD24-1N4946

Typical Electrical Characteristics



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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