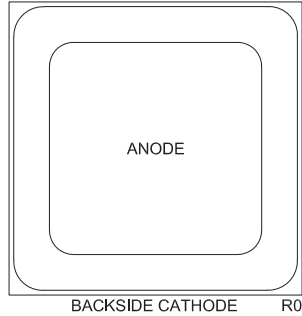


CPD06-1N5554

General Purpose Rectifier Die

3.0 Amp, 1000 Volt

The CPD06-1N5554 is a silicon 3.0 Amp, 1000 Volt general purpose rectifier ideal for all types of commercial, industrial, entertainment, and computer applications.



MECHANICAL SPECIFICATIONS:

Die Size	87 x 87 MILS
Die Thickness	9.8 MILS
Anode Bonding Pad Size	64 x 64 MILS
Top Side Metalization	Ni/Au – 5,000Å/1,350Å
Back Side Metalization	Ni/Au – 5,000Å/1,350Å
Scribe Alley Width	2.75 MILS
Wafer Diameter	4 INCHES
Gross Die Per Wafer	1,367

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

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	1000	V
DC Blocking Voltage	V_R	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	700	V
Average Forward Current ($T_A=55^{\circ}\text{C}$)	I_O	3.0	A
Peak Forward Surge Current, $t_p=8.3\text{ms}$	I_{FSM}	100	A
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^{\circ}\text{C}$

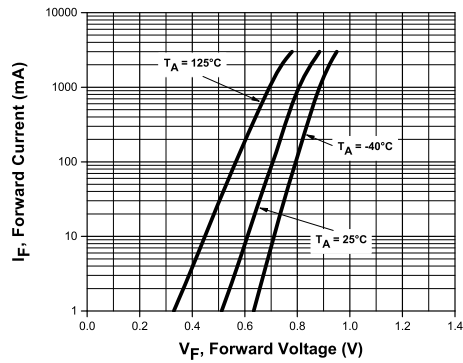
ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$ unless otherwise)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_R	$V_R=1000\text{V}$		1.0	μA
BV_R	$I_R=50\mu\text{A}$	1100		V
V_F	$I_F=3.0\text{A}$		1.1	V
C_J	$V_R=0, f=1.0\text{MHz}$		120	pF
t_{rr}	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$		4.0	μs

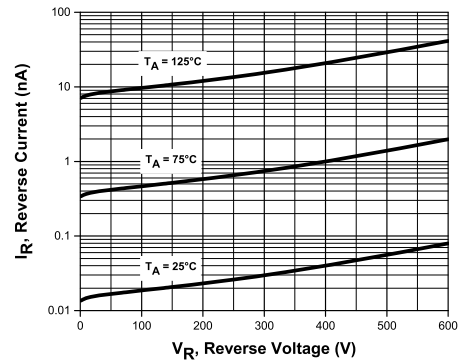
CPD06-1N5554

Typical Electrical Characteristics

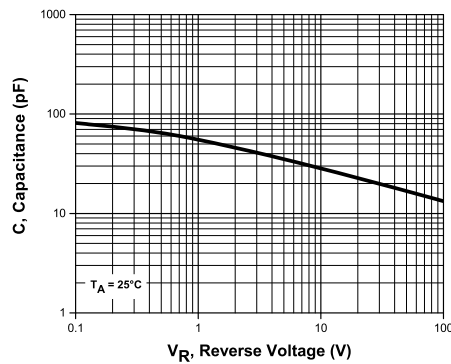
Forward Voltage



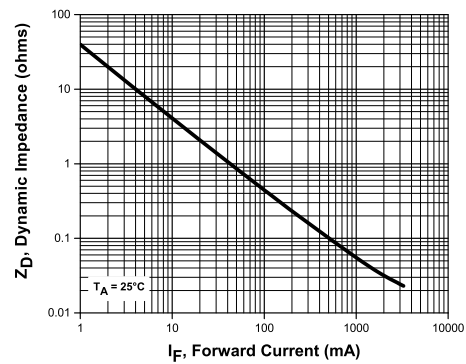
Leakage Current



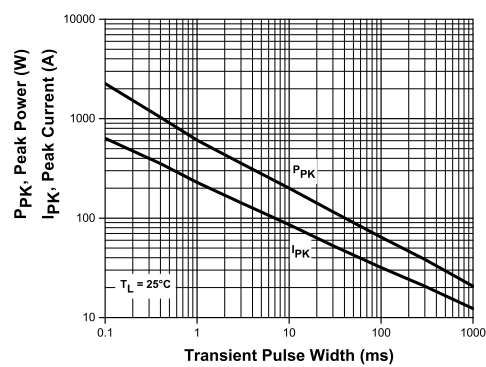
Capacitance



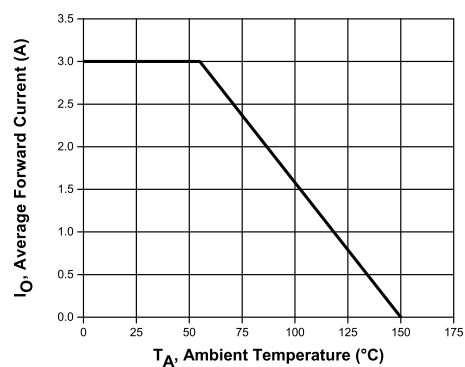
Forward Dynamic Impedance



Transient Peak Power and Peak Current Capacity



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

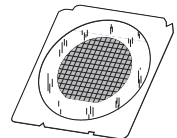
WN: Full wafer, unsawn, 100% tested with reject die inked.
(example: CP211-PART NUMBER-WN)



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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