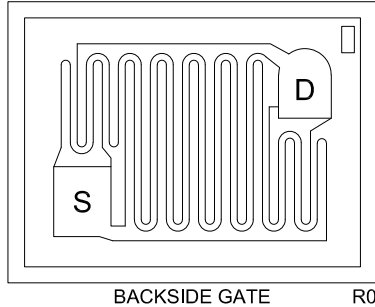


The CP216-2N4391 is a silicon N-Channel small signal JFET designed for analog switching and chopper applications.



MECHANICAL SPECIFICATIONS:

Die Size	21 x 16 MILS
Die Thickness	7.9 MILS
Drain Bonding Pad Size	3.3 x 4.5 MILS
Source Bonding Pad Size	3.3 x 4.5 MILS
Top Side Metalization	Al – 10,000Å
Back Side Metalization	Au – 3,250Å
Scribe Alley Width	2.0 MILS
Wafer Diameter	4 INCHES
Gross Die Per Wafer	29,732

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

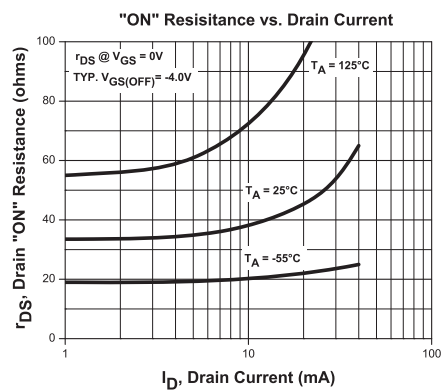
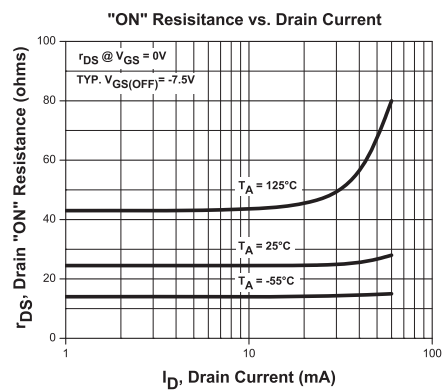
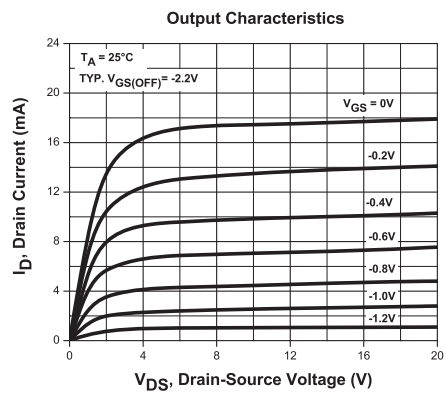
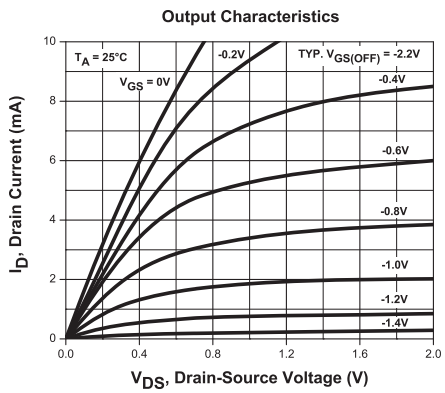
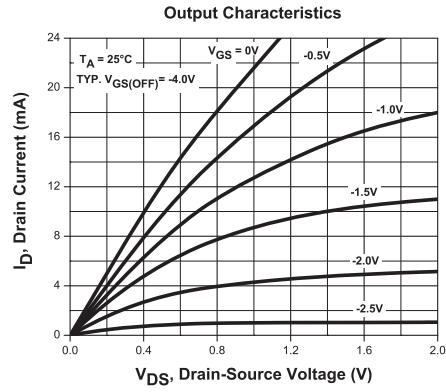
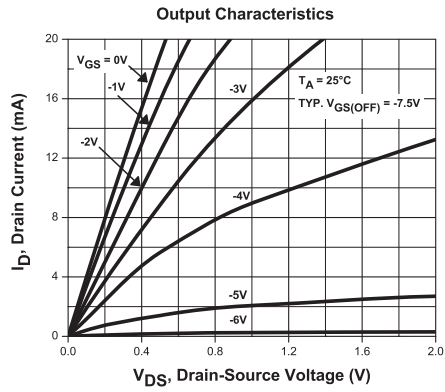
	SYMBOL		UNITS
Gate-Drain Voltage	V_{GD}	40	V
Gate-Source Voltage	V_{GS}	40	V
Gate Current	I_G	50	mA
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +175	$^\circ\text{C}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{GSS}	$V_{GS}=20\text{V}$		0.1	nA
I_{DSS}	$V_{DS}=20\text{V}$	50	150	mA
$I_{D(OFF)}$	$V_{DS}=20\text{V}, V_{GS}=12\text{V}$		0.1	nA
BV_{GSS}	$I_G=1.0\mu\text{A}$	40		V
$V_{GS(OFF)}$	$V_{DS}=20\text{V}, I_D=1.0\text{nA}$	4.0	10	V
$V_{GS(f)}$	$V_{DS}=0, I_G=1.0\text{mA}$		1.0	V
$V_{DS(ON)}$	$I_D=12\text{mA}$		0.4	V
$r_{DS(ON)}$	$I_D=1.0\text{mA}, V_{GS}=0$		30	Ω
C_{rss}	$V_{GS}=12\text{V}, V_{DS}=0, f=1.0\text{MHz}$		3.5	pF
C_{iss}	$V_{DS}=20\text{V}, V_{GS}=0, f=1.0\text{MHz}$		20	pF
t_{on}	$I_{D(ON)}=12\text{mA}$		15	ns
t_{off}	$V_{GS(OFF)}=12\text{V}$		20	ns

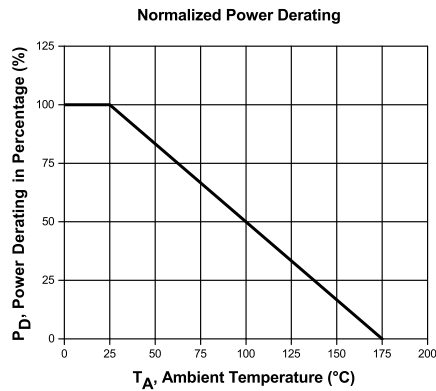
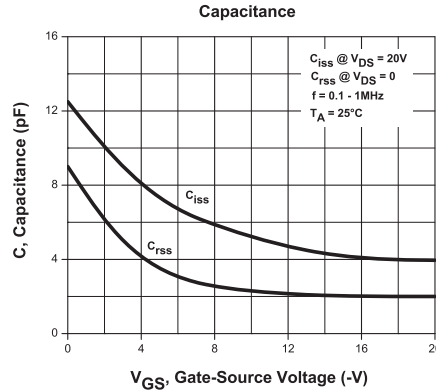
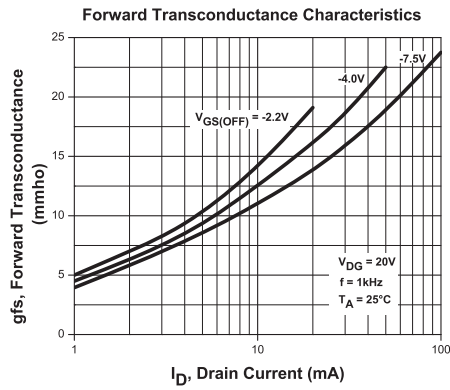
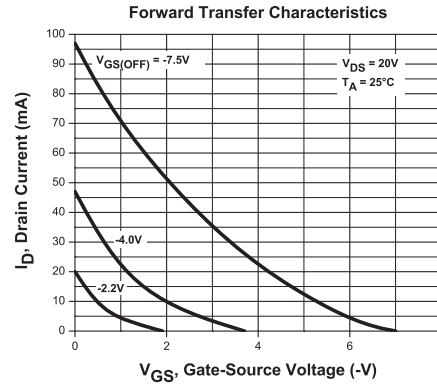
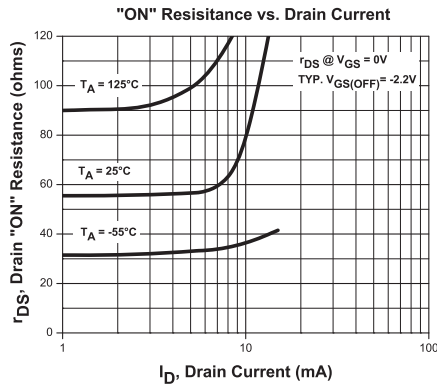
CP216-2N4391

Typical Electrical Characteristics



CP216-2N4391

Typical Electrical Characteristics



R1 (28-August 2020)

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

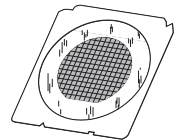
WN: Full wafer, unsawn, 100% tested with reject die inked.
(example: CP211-PART NUMBER-WN)



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.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