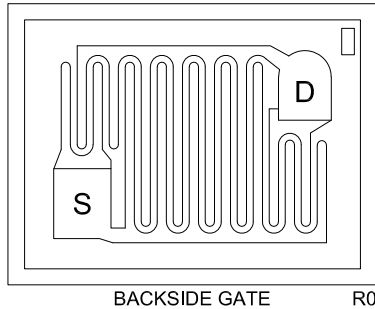


The CP216-2N4391 is a silicon N-Channel small signal JFET designed for analog switching and chopper applications.



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

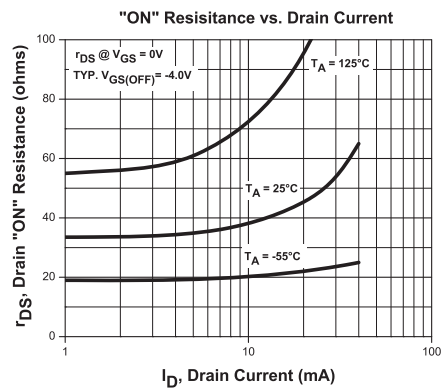
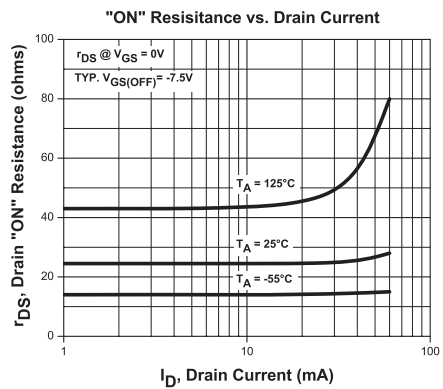
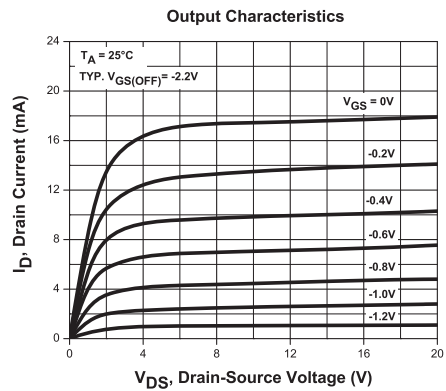
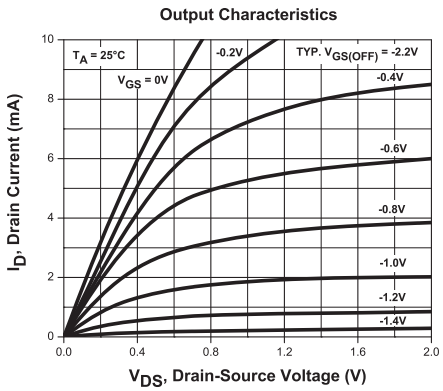
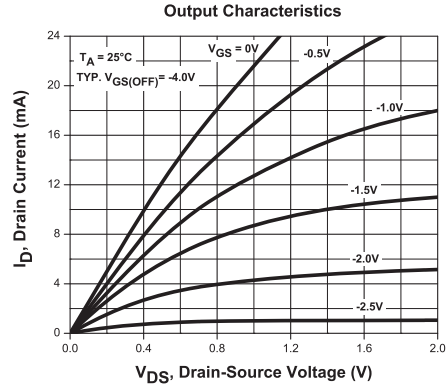
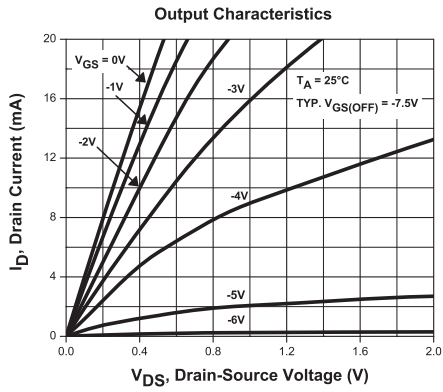
	SYMBOL		UNITS
Gate-Drain Voltage	$V_{GD}$	40	V
Gate-Source Voltage	$V_{GS}$	40	V
Gate Current	$I_G$	50	mA
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +175	$^\circ\text{C}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_{GSS}$	$V_{GS}=20V$		0.1	nA
$I_{DSS}$	$V_{DS}=20V$	50	150	mA
$I_{D(OFF)}$	$V_{DS}=20V, V_{GS}=12V$		0.1	nA
$BV_{GSS}$	$I_G=1.0\mu A$	40		V
$V_{GS(OFF)}$	$V_{DS}=20V, I_D=1.0nA$	4.0	10	V
$V_{GS(f)}$	$V_{DS}=0, I_G=1.0mA$		1.0	V
$V_{DS(ON)}$	$I_D=12mA$		0.4	V
$r_{DS(ON)}$	$I_D=1.0mA, V_{GS}=0$		30	$\Omega$
$C_{rss}$	$V_{GS}=12V, V_{DS}=0, f=1.0MHz$		3.5	pF
$C_{iss}$	$V_{DS}=20V, V_{GS}=0, f=1.0MHz$		14	pF
$t_{on}$	$I_{D(ON)}=12mA$		15	ns
$t_{off}$	$V_{GS(OFF)}=12V$		20	ns

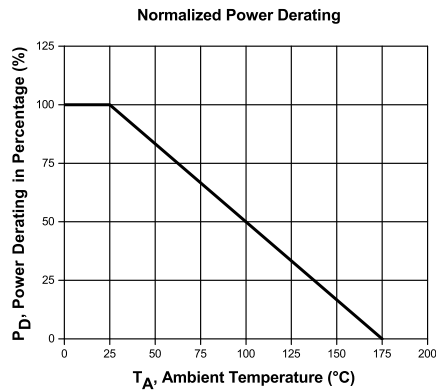
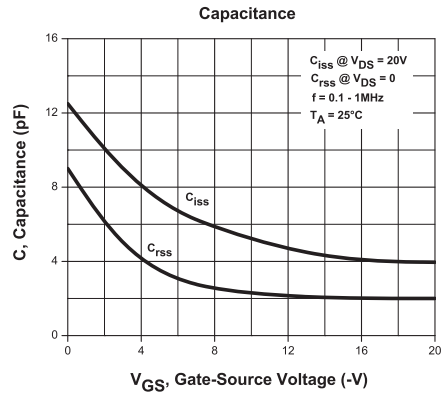
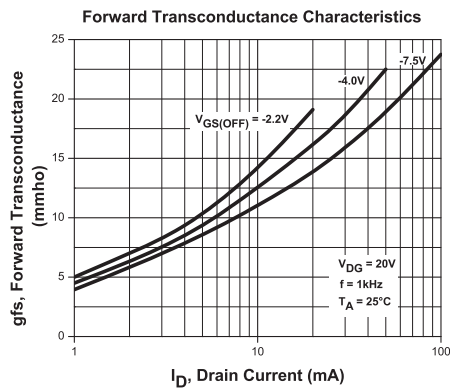
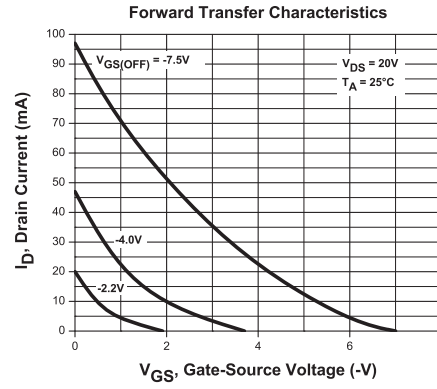
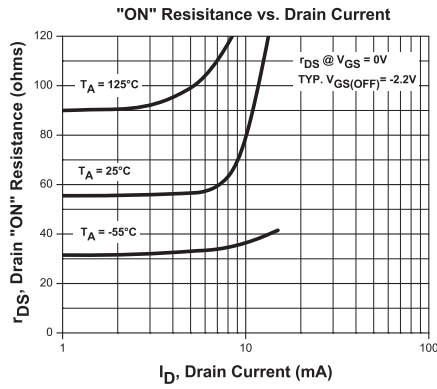
# CP216-2N4391

## Typical Electrical Characteristics



# CP216-2N4391

## Typical Electrical Characteristics



R0 (23-May 2018)

## BARE DIE PACKING OPTIONS

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### 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)

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### UNSAWN WAFER

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

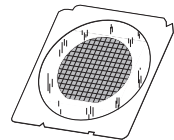
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### SAWN WAFER ON PLASTIC RING

**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](http://www.centrasemi.com/bdspecs)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> 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

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### 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).

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### CONTACT US

#### Corporate Headquarters & Customer Support Team

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