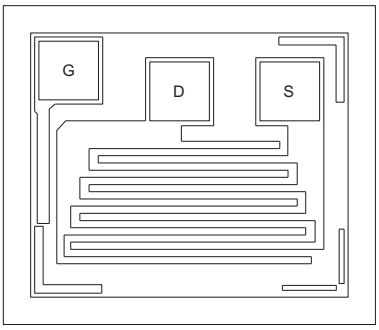
CP206-2N4393
N-Channel JFET Die

The CP206-2N4393 is a silicon N-Channel small signal JFET designed for analog switching and chopper applications.



BACKSIDE GATE R1

MECHANICAL SPECIFICATIONS:

Die Size	21 x 18 MILS
Die Thickness	8.0 MILS
Drain Bonding Pad Size	3.0 x 3.0 MILS
Source Bonding Pad Size	3.0 x 3.0 MILS
Gate Bonding Pad Size	3.0 x 3.0 MILS
Top Side Metalization	Al – 30,000Å
Back Side Metalization	Au – 6,000Å
Scribe Alley Width	3.0 MILS
Wafer Diameter	5 INCHES
Gross Die Per Wafer	45,000

MAXIMUM RATINGS: (T_A=25°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	°C

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

SYMBOL	**TEST CONDITIONS**	**MIN**	**MAX**	**UNITS**
I_{GSS}	V_{GS}=20V		0.1	nA
I_{DSS}	V_{DS}=20V	5.0	30	mA
$I_{D(OFF)}$	V_{DS}=20V, V_{GS}=5.0V		0.1	nA
BV_{GSS}	I_G=1.0μA	40		V
$V_{GS(OFF)}$	V_{DS}=20V, I_D=1.0nA	0.5	3.0	V
$V_{GS(f)}$	V_{DS}=0, I_G=1.0mA		1.0	V
$V_{DS(ON)}$	I_D=3.0mA		0.4	V
$r_{DS(ON)}$	I_D=1.0mA, V_{GS}=0		100	Ω
C_{rss}	V_{GS}=5.0V, V_{DS}=0, f=1.0MHz		3.5	pF
C_{iss}	V_{DS}=20V, V_{GS}=0, f=1.0MHz		14	pF
t_{on}	$I_{D(ON)}$=3.0mA		15	ns
t_{off}	$V_{GS(OFF)}$=5.0V		50	ns

CP206-2N4393
Typical Electrical Characteristics

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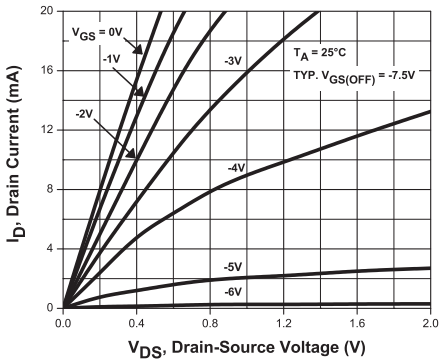
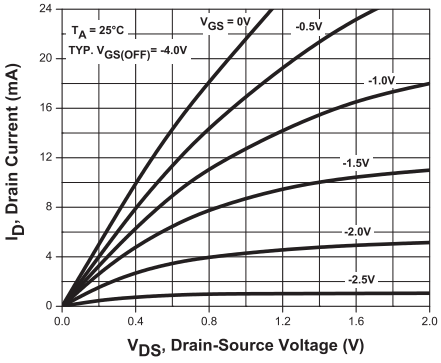
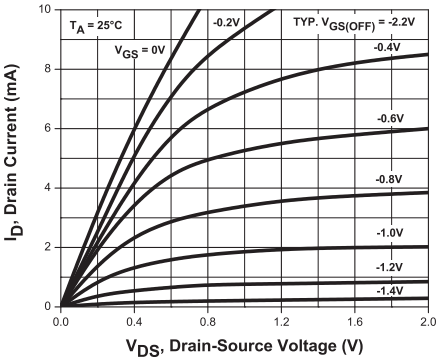
Output Characteristics



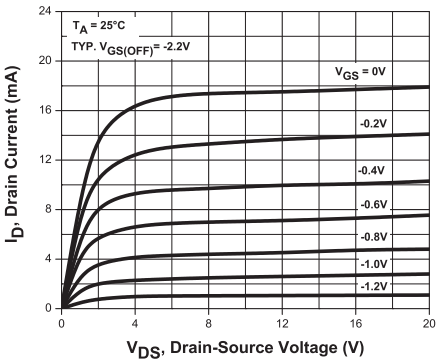
Output Characteristics



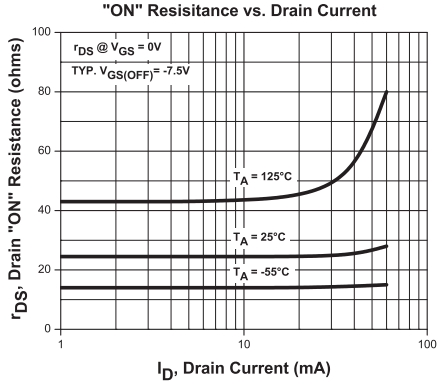
Output Characteristics



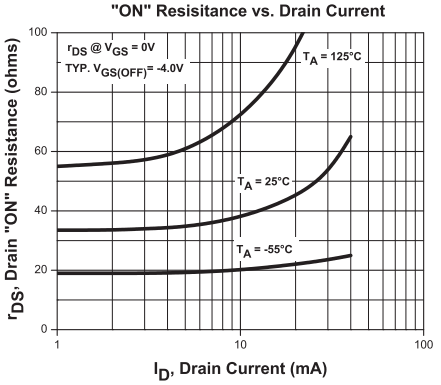
Output Characteristics



"ON" Resisitance vs. Drain Current

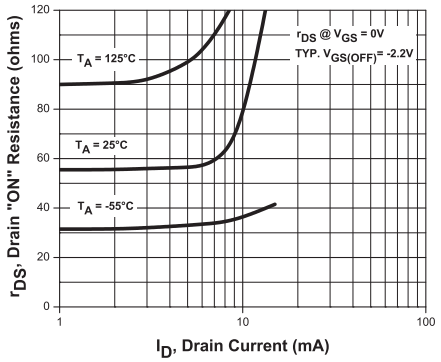


"ON" Resisitance vs. Drain Current

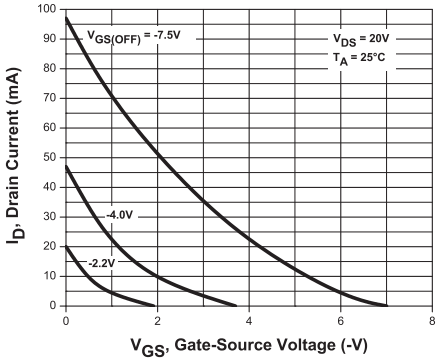


CP206-2N4393
Typical Electrical Characteristics

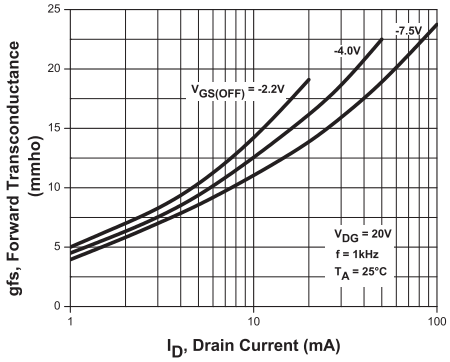
"ON" Resisitance vs. Drain Current



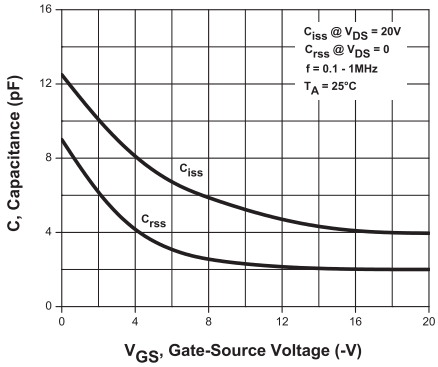
Forward Transfer Characteristics



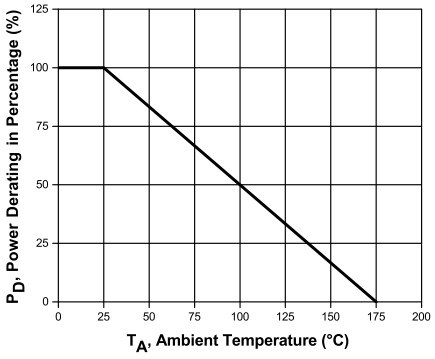
Forward Transconductance Characteristics



Capacitance



Normalized Power Derating



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- Environmental regulation compliance
- Customer specific screening
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- Special wafer diffusions
- PbSn plating options
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- Application notes
- Application and design sample kits
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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.centralsemi.com

Worldwide Field Representatives:
www.centralsemi.com/wwreps

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