

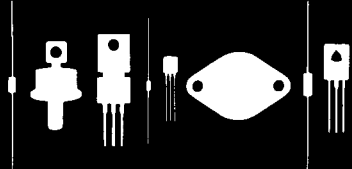
Central Semiconductor Corp.

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145 Adams Avenue
Hauppauge, New York 11788



2N3820
P-CHANNEL JUNCTION FET

JEDEC TO-92 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N3820 type is a Silicon P-Channel Junction Field Effect Transistor designed for low level amplifier applications.

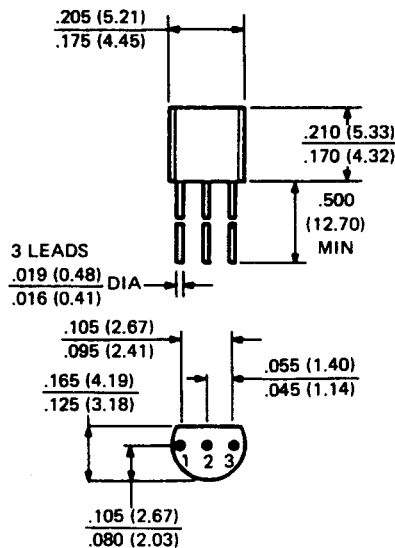
MAXIMUM RATINGS($T_A=25^\circ\text{C}$)

	SYMBOL		UNIT
Gate-Drain Voltage	V_{GD}	20	V
Drain-Source Voltage	V_{DS}	20	V
Gate-Source Voltage (Reverse)	V_{GS}	20	V
Gate Current	I_G	10	mA
Power Dissipation	P_D	360	mW
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 noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_{GSS}	$V_{GS}=10\text{V}$		20	nA
I_{GSS}	$V_{GS}=10\text{V}, T_A=100^\circ\text{C}$		2.0	μA
I_{DSS}	$V_{DS}=10\text{V}$	0.3	15	mA
BV_{GSS}	$I_G=10\mu\text{A}$	20		V
V_{GS}	$V_{DS}=10\text{V}, I_D=30\mu\text{A}$	0.3	7.9	V
$V_{GS(OFF)}$	$V_{DS}=10\text{V}, I_D=10\mu\text{A}$		8.0	V
C_{iss}	$V_{DS}=10\text{V}, V_{GS}=0, f=1.0\text{MHz}$		32	pF
C_{rss}	$V_{DS}=10\text{V}, V_{GS}=0, f=1.0\text{MHz}$		16	pF
$ y_{fs1} $	$V_{DS}=10\text{V}, V_{GS}=0, f=1.0\text{kHz}$	800	5000	μmho
$ y_{fs1} $	$V_{DS}=10\text{V}, V_{GS}=0, f=10\text{MHz}$	700		μmho
$ y_{os1} $	$V_{DS}=10\text{V}, V_{GS}=0, f=1.0\text{kHz}$		200	μmho

OUTLINE DRAWING:



LEAD CODE:

1. DRAIN
2. GATE
3. SOURCE

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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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