



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

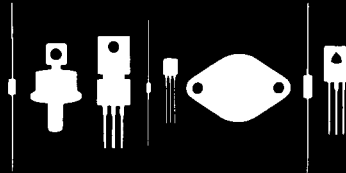
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Central  
 Semiconductor Corp.  
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 145 Adams Avenue  
 Hauppauge, New York 11788



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.

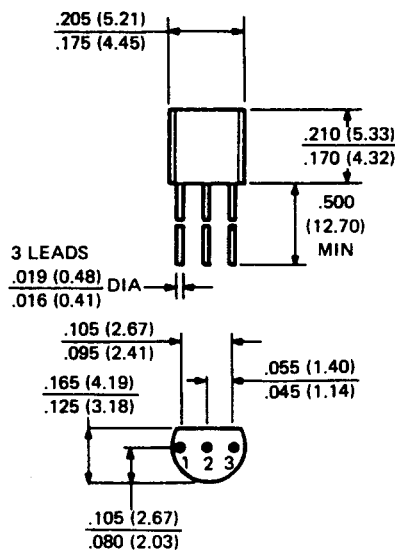
**MAXIMUM RATINGS (T<sub>A</sub>=25°C)**

	SYMBOL		UNIT
Gate-Drain Voltage	V <sub>GD</sub>	20	V
Drain-Source Voltage	V <sub>DS</sub>	20	V
Gate-Source Voltage (Reverse)	V <sub>GS</sub>	20	V
Gate Current	I <sub>G</sub>	10	mA
Power Dissipation	P <sub>D</sub>	360	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>STG</sub>	-65 TO +150	°C

**ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)**

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I <sub>GSS</sub>	V <sub>GS</sub> =10V		20	nA
I <sub>GSS</sub>	V <sub>GS</sub> =10V, T <sub>A</sub> =100°C		2.0	μA
I <sub>DSS</sub>	V <sub>DS</sub> =10V	0.3	15	mA
BV <sub>GSS</sub>	I <sub>G</sub> =10μA	20		V
V <sub>GS</sub>	V <sub>DS</sub> =10V, I <sub>D</sub> =30μA	0.3	7.9	V
V <sub>GS(OFF)</sub>	V <sub>DS</sub> =10V, I <sub>D</sub> =10μA		8.0	V
C <sub>iss</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0, f=1.0MHz		32	pF
C <sub>rss</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0, f=1.0MHz		16	pF
τ <sub>ysl</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0, f=1.0kHz	800	5000	μho
τ <sub>ysl</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0, f=10MHz	700		μho
τ <sub>ysl</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0, f=1.0kHz		200	μho

**OUTLINE DRAWING:**



**LEAD CODE:**

1. DRAIN
2. GATE
3. SOURCE

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## 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

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