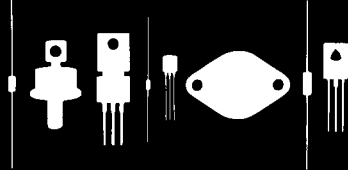


Central  
Semiconductor Corp.

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Semiconductor Corp.**

145 Adams Avenue  
Hauppauge, New York 11788



2N4918  
2N4919  
2N4920

PNP Silicon Transistor  
General Purpose Power

JEDEC TO-126 Case

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N4918, 2N4919, and 2N4920 are Silicon PNP Epitaxial Base Power Transistors designed for Medium power amplifier and switching applications.

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

		<u>2N4918</u>	<u>2N4919</u>	<u>2N4920</u>
Collector-Base Voltage	$V_{CB0}$	40V	60V	80V
Collector-Emitter Voltage	$V_{CE0}$	40V	60V	80V
Emitter-Base Voltage	$V_{EB0}$		5.0V	
Collector Current, Continuous	$I_C$		1.0A	
Collector Current, Peak	$I_{CM}$		3.0A	
Base Current	$I_B$		1.0A	
Power Dissipation ( $T_C=25^{\circ}\text{C}$ )	$P_D$		30W	
Operating & Storage Junction Temperature	$T_J, T_{stg}$		-65 to +150°C	
Thermal Resistance, Junction to Case	$\theta_{J-C}$		3.12°C/W	

ELECTRICAL CHARACTERISTICS ( $T_C=25^{\circ}\text{C}$ )

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>MAX</u>	<u>UNIT</u>
$I_{CB0}$	$V_{CB}=\text{Rated } V_{CB}$		100	$\mu\text{A}$
$I_{CEV}$	$V_{CE}=\text{Rated } V_{CE0}, V_{EB}=1.5\text{V}$		100	$\mu\text{A}$
$I_{CE0}$	$V_{CE}=0.5\text{X Rated } V_{CE0}$		500	$\mu\text{A}$
$I_{EB0}$	$V_{EB}=5.0\text{V}$		1.0	mA
$BV_{CE0}$	$I_C=0.1\text{A}$	40(2N4918)		V
		60(2N4919)		V
		80(2N4920)		V
$V_{CE(s)}$	$I_C=1.0\text{A}, I_B=0.1\text{A}$		0.6	V
$V_{BE(s)}$	$I_C=1.0\text{A}, I_B=0.1\text{A}$		1.3	V
$V_{BE(on)}$	$V_{CE}=1.0\text{V}, I_C=1.0\text{A}$		1.3	V
hFE	$V_{CE}=1.0\text{V}, I_C=50\text{mA}$	40		-
hFE	$V_{CE}=1.0\text{V}, I_C=500\text{mA}$	20	100	-
hFE	$V_{CE}=1.0\text{V}, I_C=1.0\text{A}$	10		-
fT	$V_{CE}=10\text{V}, I_C=250\text{mA}, f=1.0\text{MHz}$	3.0		MHz
$C_{ob}$	$V_{CB}=10\text{V}, f=100\text{kHz}$		100	pF



## 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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**Worldwide Distributors:**  
[www.centrasemi.com/wwdistributors](http://www.centrasemi.com/wwdistributors)

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