

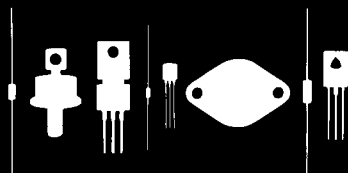
Central
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145 Adams Avenue
Hauppauge, New York 11788



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)

		2N4918	2N4919	2N4920
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	θ_{J-C}		3.12°C/W	

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_{CB0}	$V_{CB}=\text{Rated } V_{CB}$		100	μA
I_{CEV}	$V_{CE}=\text{Rated } V_{CE0}, V_{EB}=1.5\text{V}$		100	μA
I_{CE0}	$V_{CE}=0.5 \times \text{Rated } V_{CE0}$		500	μA
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
h_{FE}	$V_{CE}=1.0\text{V}, I_C=50\text{mA}$	40		-
h_{FE}	$V_{CE}=1.0\text{V}, I_C=500\text{mA}$	20	100	-
h_{FE}	$V_{CE}=1.0\text{V}, I_C=1.0\text{A}$	10		-
f_T	$V_{CE}=10\text{V}, I_C=250\text{mA}, f=1.0\text{MHz}$	3.0		MHz
C_{ob}	$V_{CB}=10\text{V}, f=100\text{kHz}$		100	pF



OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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

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.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

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