

## DESCRIPTION

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

## MAXIMUM RATINGS (TA=25°C Unless otherwise noted)

		<u>2N4918</u>	<u>2N4919</u>	2N4920	
Collector-Base Voltage	V <sub>CBO</sub>	40V	60V	8ov	
Collector-Emitter Voltage	VCEO	40V	60V	8ov	
Emitter-Base Voltage	VEBO		5.0V		
Collector Current, Continuous	10		1.0A		
Collector Current, Peak	ICM		3.0A		
Base Current	IB		1.0A		
Power Dissipation (T <sub>C</sub> =25°C)	PD		30W		
Operating & Storage Junction Temperature	TJ, T <sub>stq</sub>		-65 to + 150°C		
Thermal Resistance, Junction to Case	<del>-0</del> J−C		3.12°C/W		

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I <sub>CBO</sub>	VcB=Rated VcB		100	uA
ICEV	VCE=Rated VCEO, VEB=1.5V		100	uA
I CEO	V <sub>CF</sub> =0.5X Rated V <sub>CEO</sub>		500	uА
IEBO	V <sub>EB</sub> =5.0V		1.0	mΑ
BVCEO	I C=0.1A	40(2N4918)		V
320		60(2N4919)		V
		80 (2N4920)		٧
V <sub>CE(s)</sub>	IC=1.0A, IB=0.1A	, , ,	0.6	V
VBE(s)	IC=1.0A, IB=0.1A		1.3	V
VBE (on)	VCE=1.0V, IC=1.0A		1.3	V
hFE	V <sub>CE</sub> =1.0V, I <sub>C</sub> =50 <sub>mA</sub>	40		-
hFE	VCE=1.0V, IC=500mA	20	100	-
hFE	VCE=1.0V, IC=1.0A	10		_
fT	VCE=10V, IC=250mA, f=1.0MHz	3.0		$MH_{7}$
Cob	VCB=10V, f=100KHz		100	рF
				·

### **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 (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

#### **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

**Worldwide Distributors:** 

www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centralsemi.com/terms

www.centralsemi.com (000)

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Central Semiconductor:
2N4918 2N4918 LEDFREE 2N4920