

CentralTM

Semiconductor Corp.

145 Adams Ave., Hauppauge, NY 11788 USA

Phone (631) 435-1110 FAX (631) 435-1824

Manufacturers of World Class Discrete Semiconductors

www.centrasemi.com

2N5449

2N5450

2N5451

NPN SILICON TRANSISTOR

JEDEC TO-92-18R CASE

DESCRIPTION

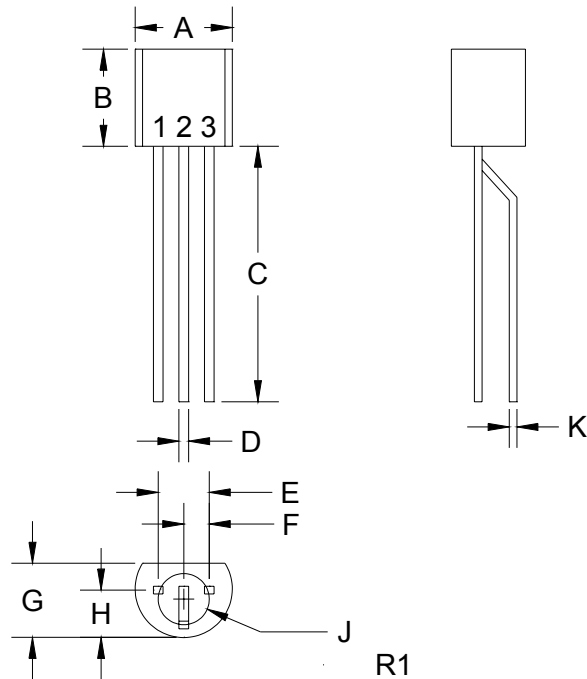
The CENTRAL SEMICONDUCTOR 2N5449, 2N5450 and 2N5451 types are Epitaxial Planar Epoxy Molded Silicon NPN Transistors designed for audio frequency and amplifier applications.

MAXIMUM RATINGS (T_A=25°C)

	SYMBOL	2N5449	2N5450	2N5451	UNITS
Collector-Base Voltage	V _{CBO}	50	50	40	V
Collector-Emitter Voltage	V _{CEO}	30	30	20	V
Emitter-Base Voltage	V _{EBO}		5.0		V
Collector Current	I _C		800		mA
Power Dissipation	P _D		625		mW
Operating and Storage Junction Temperature	T _J , T _{stg}		-65 to +150		°C
Thermal Resistance	θ _{JA}		200		°C/W

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	2N5449		2N5450		2N5451		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	
I _{CBO}	V _{CB} =20V		100		100		100	nA
I _{EBO}	V _{BE} =3.0V		100		100		100	nA
BV _{CBO}	I _C =100μA	50		50		40		V
BV _{CEO}	I _C =10mA	30		30		20		V
BV _{EBO}	I _E =100μA	5.0		5.0		5.0		V
V _{CE(SAT)}	I _C =100mA, I _B =5.0mA		0.6		0.8		1.0	V
V _{BE(ON)}	V _{CE} =2.0V, I _C =100mA	0.5	1.0	0.5	1.0	0.5	1.0	V
h _{FE}	V _{CE} =2.0V, I _C =50mA	100	300	50	150	30	600	
C _{cb}	V _{CB} =10V, I _E =0, f=1.0MHz		12		12		12	pF
h _{fe}	V _{CE} =2.0V, I _C =50mA, f=20MHz	5.0		5.0		5.0		

TO-92-18R PACKAGE - MECHANICAL OUTLINE

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A (DIA)	0.175	0.205	4.45	5.21
B	0.170	0.210	4.32	5.33
C	0.500	-	12.70	-
D	0.016	0.022	0.41	0.56
E	0.100		2.54	
F	0.050		1.27	
G	0.125	0.165	3.18	4.19
H	0.080	0.105	2.03	2.67
J (DIA)	0.100		2.54	
K	0.015		0.38	

TO-92-18R (REV: R1)

Lead Code:

- 1) Collector
- 2) Base
- 3) Emitter

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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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