

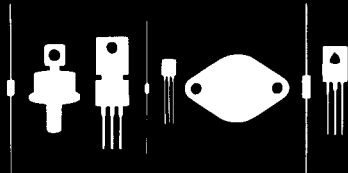
Central  
Semiconductor Corp.

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Central<sup>TM</sup>  
Semiconductor Corp.

145 Adams Avenue  
Hauppauge, New York 11788



2N4951  
2N4952  
2N4953  
2N4954

NPN SILICON TRANSISTORS

JEDEC TO-92 CASE (ECB)

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N4951 Series types are Epoxy Molded Silicon NPN Transistors designed for use as medium power amplifier and switching applications.

MAXIMUM RATINGS (T<sub>A</sub>=25°C)

	SYMBOL		UNIT
Collector-Base Voltage (Except 2N4954)	V <sub>CB0</sub>	60	V
Collector-Base Voltage (2N4954 only)	V <sub>CB0</sub>	40	V
Collector-Emitter Voltage	V <sub>CEO</sub>	30	V
Emitter-Base Voltage	V <sub>EBO</sub>	5.0	V
Collector Current	I <sub>C</sub>	1.0	A
Power Dissipation	P <sub>D</sub>	625	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)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I <sub>CB0</sub>	V <sub>CB</sub> =40V		50	nA
BV <sub>CB0</sub> (except 2N4954)	I <sub>C</sub> =1.0μA	60		V
BV <sub>CB0</sub> (2N4954 only)	I <sub>C</sub> =1.0μA	40		V
BV <sub>CEO</sub>	I <sub>C</sub> =10mA	30		V
BV <sub>EBO</sub>	I <sub>E</sub> =1.0μA	5.0		V
V <sub>CE</sub> (SAT)	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA		0.3	V
V <sub>BE</sub> (SAT)	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA		1.3	V
C <sub>ob</sub>	V <sub>CB</sub> =10V, f=1.0MHz		8.0	pF
f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =20mA, f=100MHz	250		MHz
t <sub>off</sub>	V <sub>CC</sub> =30V, I <sub>C</sub> =150mA, I <sub>B1</sub> =I <sub>B2</sub> =15mA		400	ns
t <sub>on</sub>	V <sub>CC</sub> =30V, I <sub>C</sub> =150mA, I <sub>B1</sub> =15mA		40	ns
		2N4951		
		MIN	MAX	
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =1.0mA	20	50	20
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =10mA	40	75	40
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =150mA	60	200	60
		2N4952		
		MIN	MAX	
		100	300	
		2N4953		
		MIN	MAX	
		200	600	
		2N4954		
		MIN	MAX	
		60	600	



To-92(ECB)

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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

#### Corporate Headquarters & Customer Support Team

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