

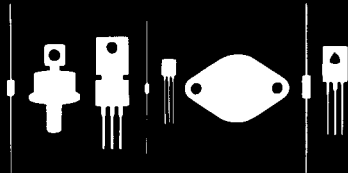
Central  
Semiconductor Corp.

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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 ( $T_A=25^{\circ}\text{C}$ )

	SYMBOL		UNIT
Collector-Base Voltage (Except 2N4954)	$V_{CB0}$	60	V
Collector-Base Voltage (2N4954 only)	$V_{CB0}$	40	V
Collector-Emitter Voltage	$V_{CEO}$	30	V
Emitter-Base Voltage	$V_{EBO}$	5.0	V
Collector Current	$I_C$	1.0	A
Power Dissipation	$P_D$	625	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 TO +150	$^{\circ}\text{C}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT																																								
$I_{CB0}$	$V_{CB}=40\text{V}$		50	nA																																								
$BV_{CB0}$ (except 2N4954)	$I_C=1.0\mu\text{A}$	60		V																																								
$BV_{CB0}$ (2N4954 only)	$I_C=1.0\mu\text{A}$	40		V																																								
$BV_{CEO}$	$I_C=10\text{mA}$	30		V																																								
$BV_{EBO}$	$I_E=1.0\mu\text{A}$	5.0		V																																								
$V_{CE(SAT)}$	$I_C=150\text{mA}, I_B=15\text{mA}$		0.3	V																																								
$V_{BE(SAT)}$	$I_C=150\text{mA}, I_B=15\text{mA}$		1.3	V																																								
$C_{ob}$	$V_{CB}=10\text{V}, f=1.0\text{MHz}$		8.0	pF																																								
$f_T$	$V_{CE}=10\text{V}, I_C=20\text{mA}, f=100\text{MHz}$	250		MHz																																								
$t_{off}$	$V_{CC}=30\text{V}, I_C=150\text{mA}, I_{B1}=I_{B2}=15\text{mA}$		400	ns																																								
$t_{on}$	$V_{CC}=30\text{V}, I_C=150\text{mA}, I_{B1}=15\text{mA}$		40	ns																																								
		<table border="1"> <thead> <tr> <th colspan="2">2N4951</th> <th colspan="2">2N4952</th> <th colspan="2">2N4953</th> <th colspan="2">2N4954</th> </tr> <tr> <th>MIN</th> <th>MAX</th> <th>MIN</th> <th>MAX</th> <th>MIN</th> <th>MAX</th> <th>MIN</th> <th>MAX</th> </tr> </thead> <tbody> <tr> <td>20</td> <td></td> <td>50</td> <td></td> <td>75</td> <td></td> <td>20</td> <td></td> </tr> <tr> <td>40</td> <td></td> <td>75</td> <td></td> <td>150</td> <td></td> <td>40</td> <td></td> </tr> <tr> <td>60</td> <td>200</td> <td>100</td> <td>300</td> <td>200</td> <td>600</td> <td>60</td> <td>600</td> </tr> </tbody> </table>		2N4951		2N4952		2N4953		2N4954		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	20		50		75		20		40		75		150		40		60	200	100	300	200	600	60	600	
2N4951		2N4952		2N4953		2N4954																																						
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20		50		75		20																																						
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60	200	100	300	200	600	60	600																																					
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