

2N6551 2N6552 2N6553 NPN  
 2N6554 2N6555 2N6556 PNP

**COMPLEMENTARY  
 SILICON TRANSISTORS**



**TO-202 CASE**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 2N6551, 2N6554 series types are complementary silicon transistors manufactured by the epitaxial planar process, designed for general purpose audio amplifier applications.

**MARKING: FULL PART NUMBER**

**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

Collector-Base Voltage
Collector-Emitter Voltage
Emitter-Base Voltage
Continuous Collector Current
Peak Collector Current
Continuous Base Current
Power Dissipation
Power Dissipation ( $T_C=25^\circ\text{C}$ )
Operating and Storage Junction Temperature
Thermal Resistance
Thermal Resistance

SYMBOL	2N6551	2N6552	2N6553	UNITS
	2N6554	2N6555	2N6556	
$V_{CB0}$	60	80	100	V
$V_{CEO}$	60	80	100	V
$V_{EBO}$		5.0		V
$I_C$		1.0		A
$I_{CM}$		2.0		A
$I_B$		0.1		A
$P_D$		2.0		W
$P_D$		10		W
$T_J, T_{stg}$		-65 to +150		$^\circ\text{C}$
$\theta_{JA}$		62.5		$^\circ\text{C/W}$
$\theta_{JC}$		12.5		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	2N6551		2N6552		2N6553		UNITS
		2N6554	MIN	MAX	2N6555	MIN	MAX	
$I_{CBO}$	$V_{CB}=40\text{V}$	-	-	100	-	-	-	nA
$I_{CBO}$	$V_{CB}=60\text{V}$	-	-	-	-	100	-	nA
$I_{CBO}$	$V_{CB}=80\text{V}$	-	-	-	-	-	100	nA
$I_{EBO}$	$V_{EB}=4.0\text{V}$	-	-	100	-	100	-	nA
$BV_{CBO}$	$I_C=100\mu\text{A}$	60	-	-	80	-	100	V
$BV_{CEO}$	$I_C=1.0\text{mA}$	60	-	-	80	-	100	V
$BV_{EBO}$	$I_E=100\mu\text{A}$	5.0	-	-	5.0	-	5.0	V
$V_{CE(SAT)}$	$I_C=250\text{mA}, I_B=10\text{mA}$	-	0.5	-	0.5	-	0.5	V
$V_{CE(SAT)}$	$I_C=1.0\text{A}, I_B=100\text{mA}$	-	1.0	-	1.0	-	1.0	V
$V_{BE(ON)}$	$V_{CE}=5.0\text{V}, I_C=250\text{mA}$	-	1.2	-	1.2	-	1.2	V
$h_{FE}$	$V_{CE}=1.0\text{V}, I_C=10\text{mA}$	60	-	-	60	-	60	
$h_{FE}$	$V_{CE}=1.0\text{V}, I_C=50\text{mA}$	80	300	-	80	300	-	
$h_{FE}$	$V_{CE}=1.0\text{V}, I_C=250\text{mA}$	60	-	-	60	-	60	
$h_{FE}$	$V_{CE}=1.0\text{V}, I_C=500\text{mA}$	25	-	-	25	-	25	
$f_T$	$V_{CE}=5.0\text{V}, I_C=100\text{mA}, f=20\text{MHz}$	75	375	-	75	375	-	MHz
$C_{ob}$	$V_{CB}=20\text{V}, I_E=0, f=1.0\text{MHz}$	-	18	-	-	18	-	pF

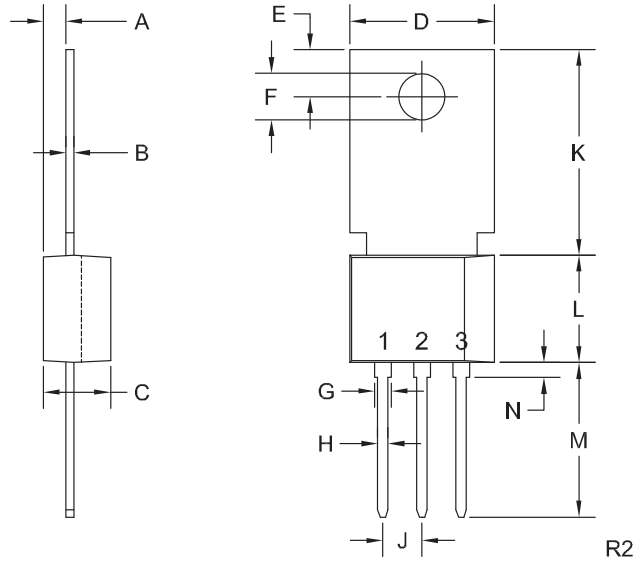
R1 (23-January 2012)

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**TO-202 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) Emitter
  - 2) Base
  - 3) Collector
- Tab is common to pin 3

**MARKING:**

**FULL PART NUMBER**

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.055	0.071	1.40	1.80
B	0.016	0.024	0.40	0.60
C	0.173	0.181	4.40	4.60
D	0.374	0.413	9.50	10.5
E	0.118	0.154	3.00	3.90
F (DIA)	0.124	0.150	3.15	3.80
G	0.035	0.055	0.90	1.40
H	0.023	0.031	0.59	0.80
J	0.094	0.106	2.39	2.69
K	0.459	0.559	11.66	14.21
L	0.280	0.346	7.12	8.80
M	0.406	0.531	10.3	13.5
N	0.024	0.059	0.60	1.50

TO-202 (REV: R2)

R1 (23-January 2012)

## 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

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