

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

**COMPLEMENTARY
SILICON TRANSISTORS**



TO-202 CASE



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		$^\circ\text{C}$
θ_{JA}		62.5		$^\circ\text{C/W}$
θ_{JC}		12.5		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	2N6551		2N6552		2N6553		UNITS
		2N6554	2N6555	2N6555	2N6556	2N6556	2N6556	
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	-	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	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	75	375	MHz
C_{ob}	$V_{CB}=20\text{V}, I_E=0, f=1.0\text{MHz}$	-	18	-	18	-	18	pF

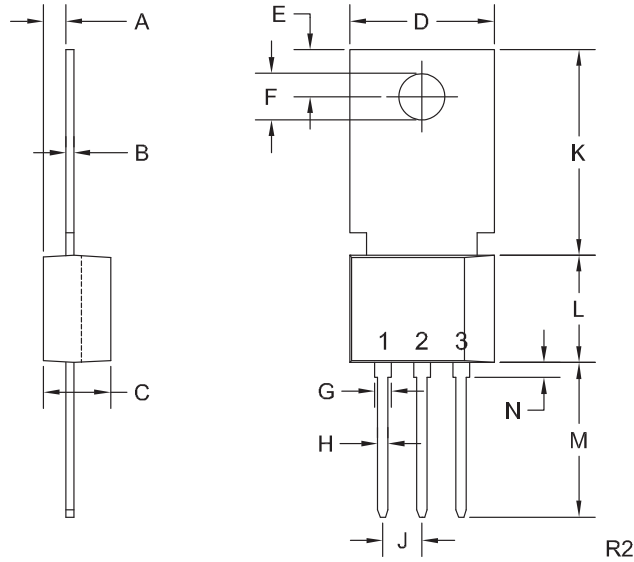
R1 (23-January 2012)

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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



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

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.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

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