

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

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Manufacturers of World Class Discrete Semiconductors

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

COMPLEMENTARY SILICON TRANSISTOR

JEDEC TO-202 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N6551 series and 2N6554 series types are Complementary Silicon Transistors manufactured by the epitaxial planar process designed for general purpose audio amplifier applications.

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

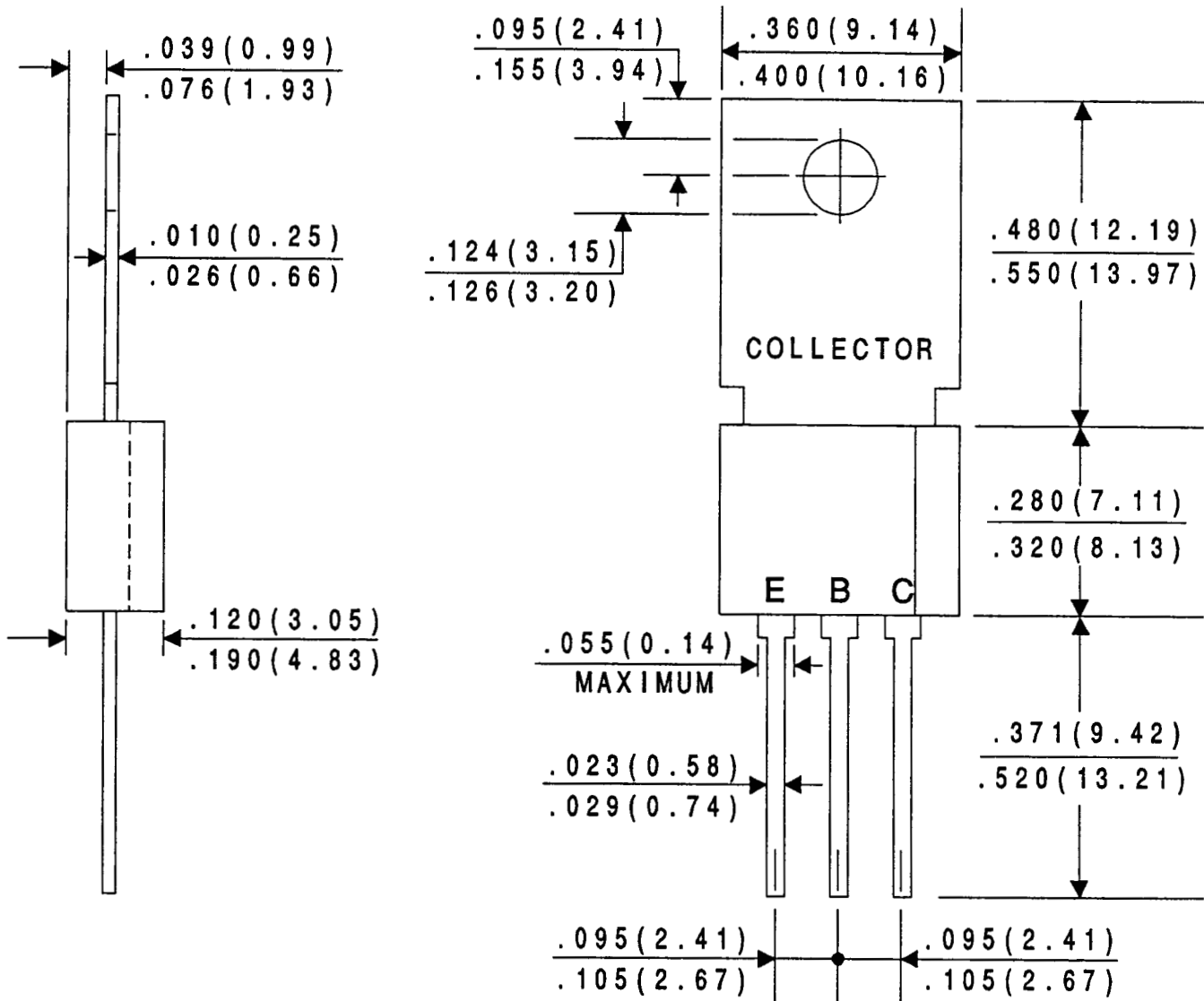
	SYMBOL	2N6551 2N6554	2N6552 2N6555	2N6553 2N6556	UNITS
Collector-Base Voltage	$V_{CB0}$	60	80	100	V
Collector-Emitter Voltage	$V_{CE0}$	60	80	100	V
Emitter-Base Voltage	$V_{EBO}$		5.0		V
Collector Current	$I_C$		1.0		A
Peak Collector Current	$I_{CM}$		2.0		A
Base Current	$I_B$		100		mA
Power Dissipation	$P_D$		2.0		W
Power Dissipation ( $T_C = 25^\circ\text{C}$ )	$P_D$		10		W
Operating and Storage					
Junction Temperature	$T_J, T_{stg}$		-65 to +150		$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$		62.5		$^\circ\text{C/W}$
Thermal Resistance	$\theta_{JC}$		12.5		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	2N6551 2N6554		2N6552 2N6555		2N6553 2N6556		UNITS
		MIN	MAX	MIN	MAX	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
$I_{EBO}$	$V_{BE} = 4.0\text{V}$		100		100		100	nA
$BV_{CE0}$	$I_C = 1.0\text{mA}$	60		80		100		V
$BV_{CB0}$	$I_C = 100\mu\text{A}$	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

(OVER)

# JEDEC TO-202 CASE - MECHANICAL OUTLINE



All Dimensions in Inches (mm).