

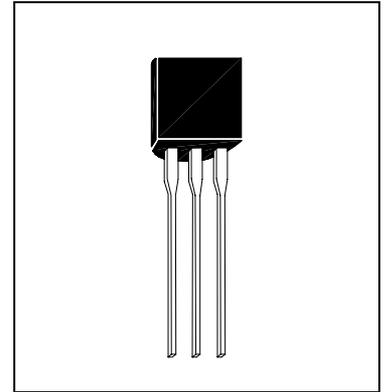


2N5551

NPN EPITAXIAL PLANAR TRANSISTOR

Description

The 2N5551 is designed for amplifier transistor.



Features

- Complements to PNP Type 2N5401.
- High Collector-Emitter Breakdown Voltage. $V_{CEO} > 160V$ (@ $I_C = 1mA$)

Absolute Maximum Ratings

- Maximum Temperatures
 - Storage Temperature -55~+150°C
 - Junction Temperature +150°C Maximum
- Maximum Power Dissipation
 - Total Power Dissipation ($T_a = 25^\circ C$) 625 mW
- Maximum Voltages and Currents ($T_a = 25^\circ C$)
 - V_{CBO} Collector to Base Voltage 180 V
 - V_{CEO} Collector to Emitter Voltage 160 V
 - V_{EBO} Emitter to Base Voltage 6 V
 - I_C Collector Current 600 mA

Characteristics ($T_a = 25^\circ C$)

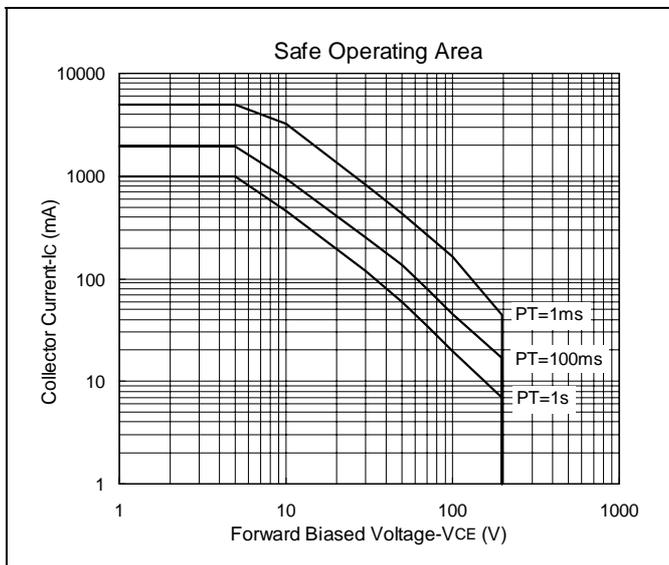
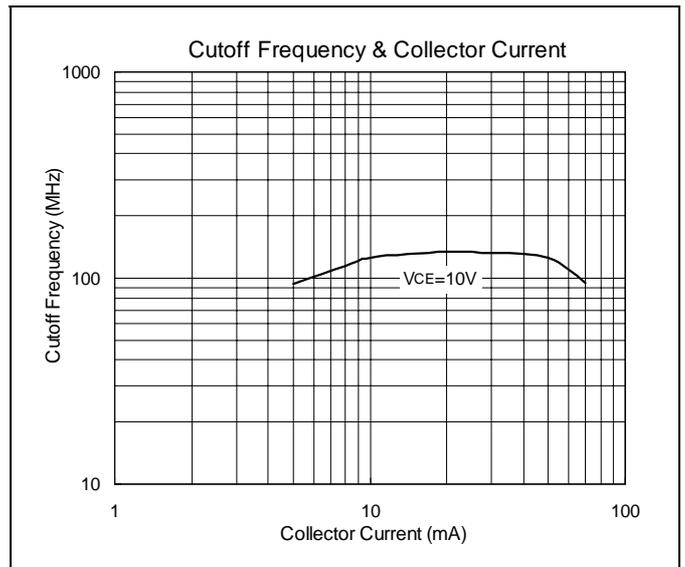
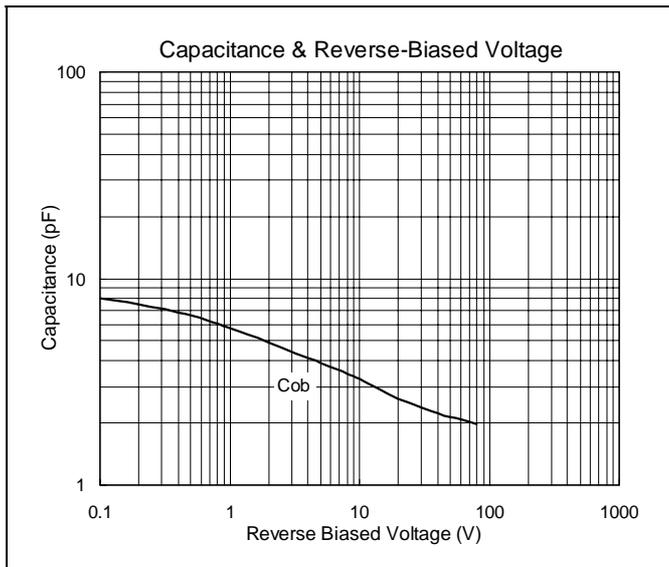
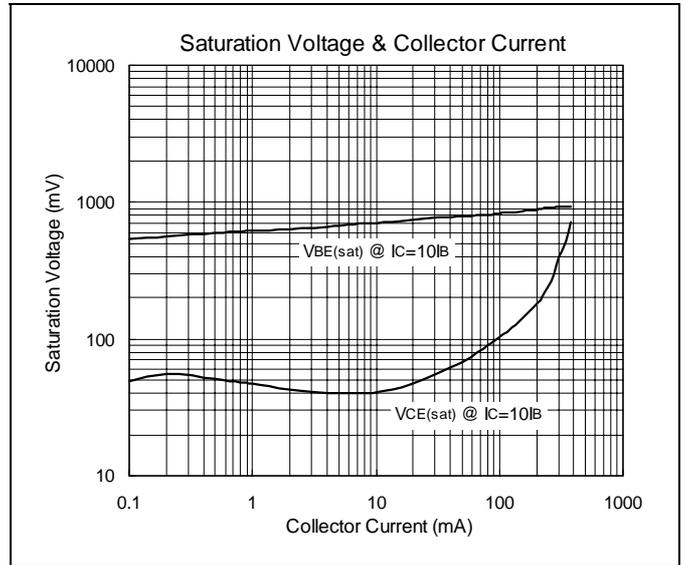
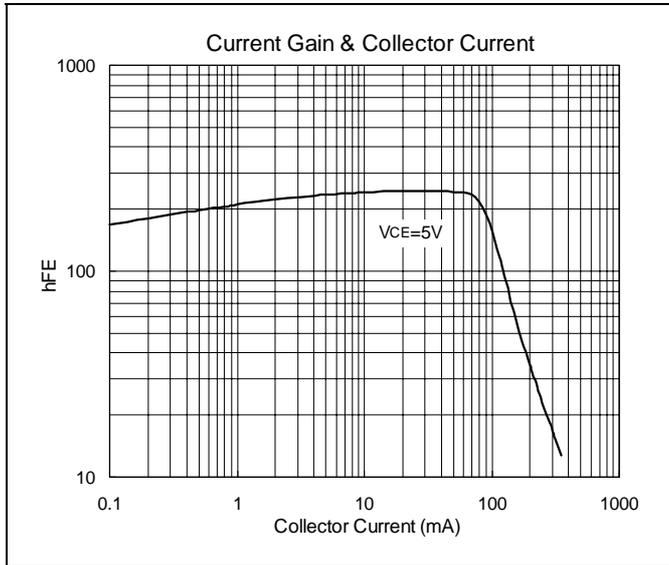
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
V_{CBO}	180	-	-	V	$I_C = 100\mu A, I_E = 0$
V_{CEO}	160	-	-	V	$I_C = 1.0mA, I_B = 0$
V_{EBO}	6	-	-	V	$I_E = 10\mu A, I_C = 0$
I_{CBO}	-	-	50	nA	$V_{CB} = 120V, I_E = 0$
I_{EBO}	-	-	50	nA	$V_{EB} = 4V, I_C = 0$
$V_{CE(sat)1}$	-	-	0.15	V	$I_C = 10mA, I_B = 1.0mA$
$V_{CE(sat)2}$	-	-	0.2	V	$I_C = 50mA, I_B = 5mA$
$V_{BE(sat)1}$	-	-	1	V	$I_C = 10mA, I_B = 1mA$
$V_{BE(sat)2}$	-	-	1	V	$I_C = 50mA, I_B = 5mA$
h_{FE1}	>80	-	-		$V_{CE} = 5V, I_C = 1mA$
h_{FE2}	80	160	400		$V_{CE} = 5V, I_C = 10mA$
h_{FE3}	50	-	-		$V_{CE} = 5V, I_C = 50mA$
f_T	100	-	300	MHz	$V_{CE} = 10V, I_C = 10mA, f = 100MHz$
C_{ob}	-	-	6	pF	$V_{CB} = 10V, f = 1MHz, I_E = 0$

Classification of h_{FE2}

Rank	A	N	C
Range	80-200	100-250	160-400

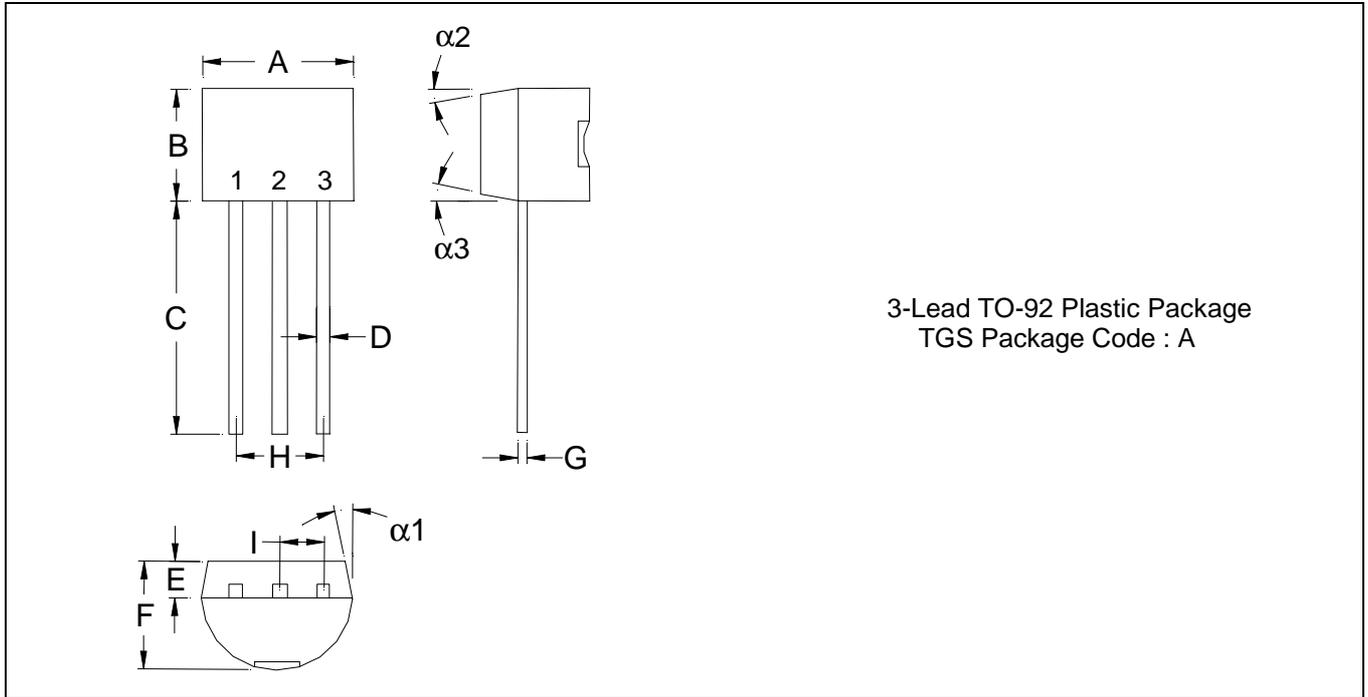


Characteristics Curve





TO-92 Dimension



*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1704	0.1902	4.33	4.83	G	0.0142	0.0220	0.36	0.56
B	0.1704	0.1902	4.33	4.83	H	-	*0.1000	-	*2.54
C	0.5000	-	12.70	-	I	-	*0.0500	-	*1.27
D	0.0142	0.0220	0.36	0.56	$\alpha 1$	-	*5°	-	*5°
E	-	*0.0500	-	*1.27	$\alpha 2$	-	*2°	-	*2°
F	0.1323	0.1480	3.36	3.76	$\alpha 3$	-	*2°	-	*2°