

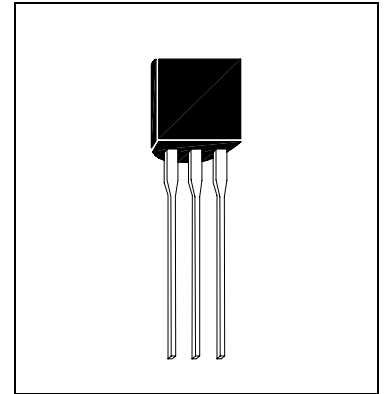


2N5551

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_{CB0} Collector to Base Voltage 180 V
 - V_{CEO} Collector to Emitter Voltage 160 V
 - V_{EB0} Emitter to Base Voltage 6 V
 - I_C Collector Current 600 mA

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

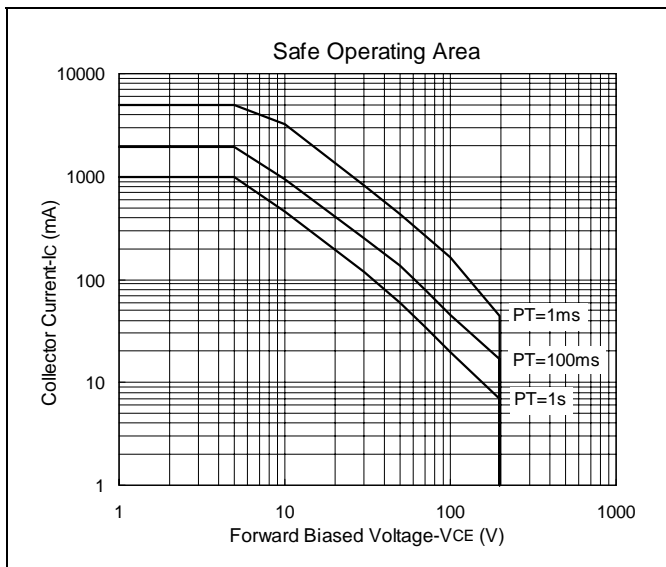
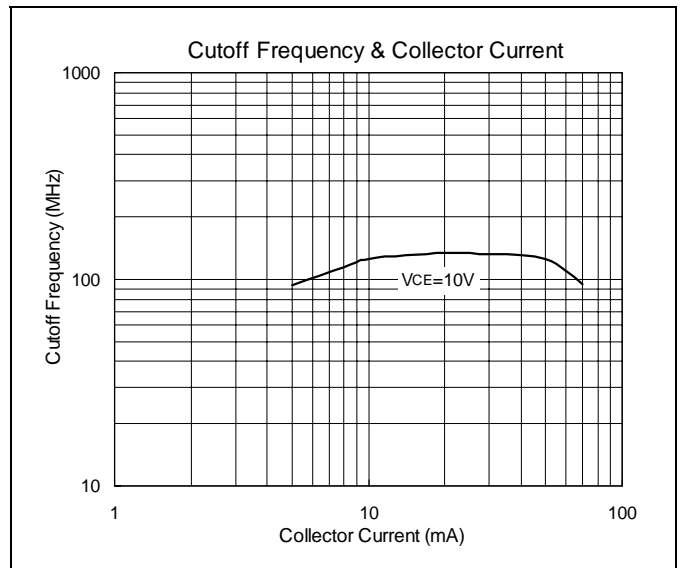
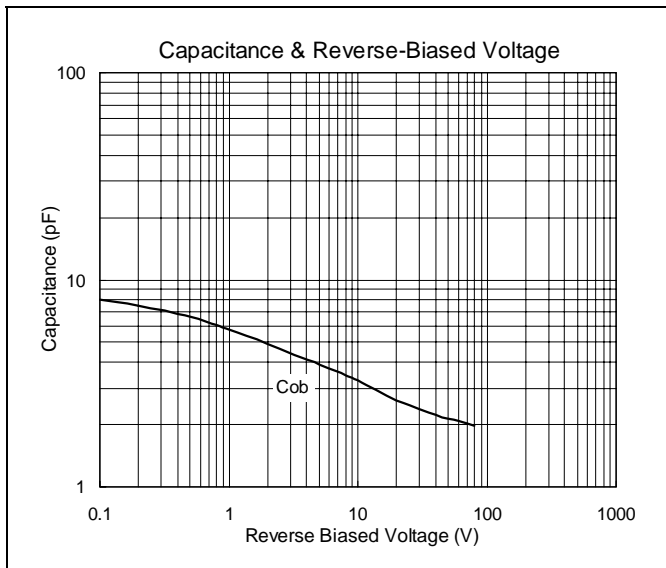
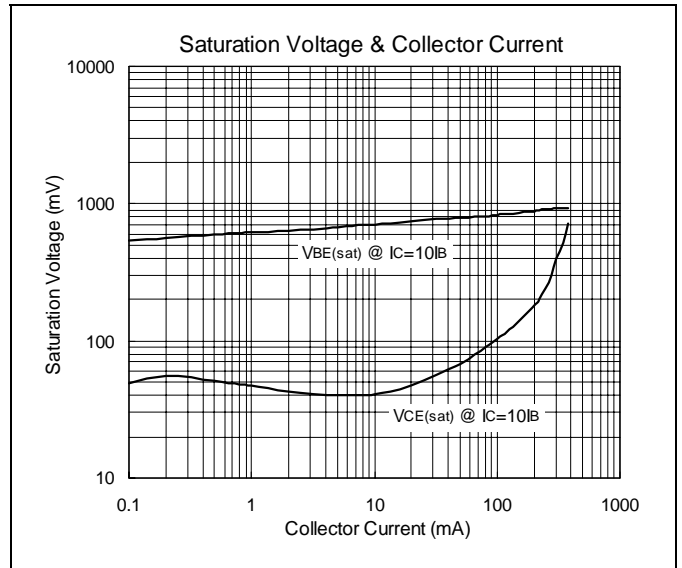
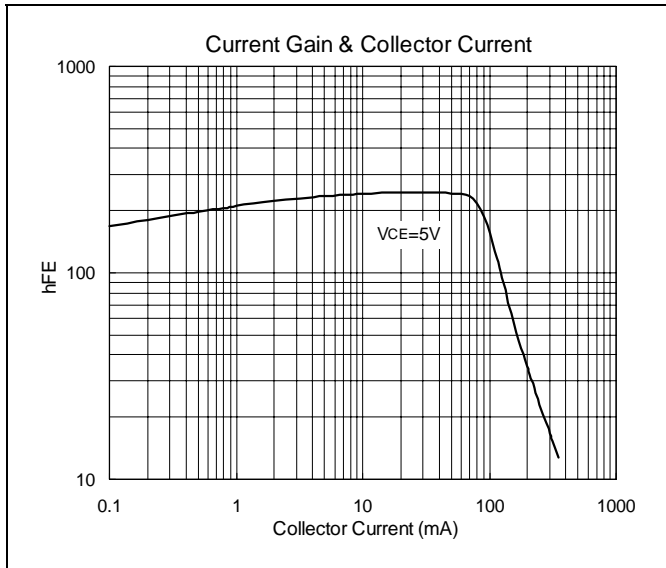
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
B _V CB0	180	-	-	V	I _C =100uA, I _E =0
B _V CEO	160	-	-	V	I _C =1.0mA, I _B =0
B _V EB0	6	-	-	V	I _E =10uA, I _C =0
I _C B0	-	-	50	nA	V _{CB} =120V, I _E =0
I _E B0	-	-	50	nA	V _{EB} =4V, I _C =0
V _{CE} (sat)1	-	-	0.15	V	I _C =10mA, I _B =1.0mA
V _{CE} (sat)2	-	-	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 _{FE} 1	>80	-	-		V _{CE} =5V, I _C =1mA
h _{FE} 2	80	160	400		V _{CE} =5V, I _C =10mA
h _{FE} 3	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_{FE}2

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

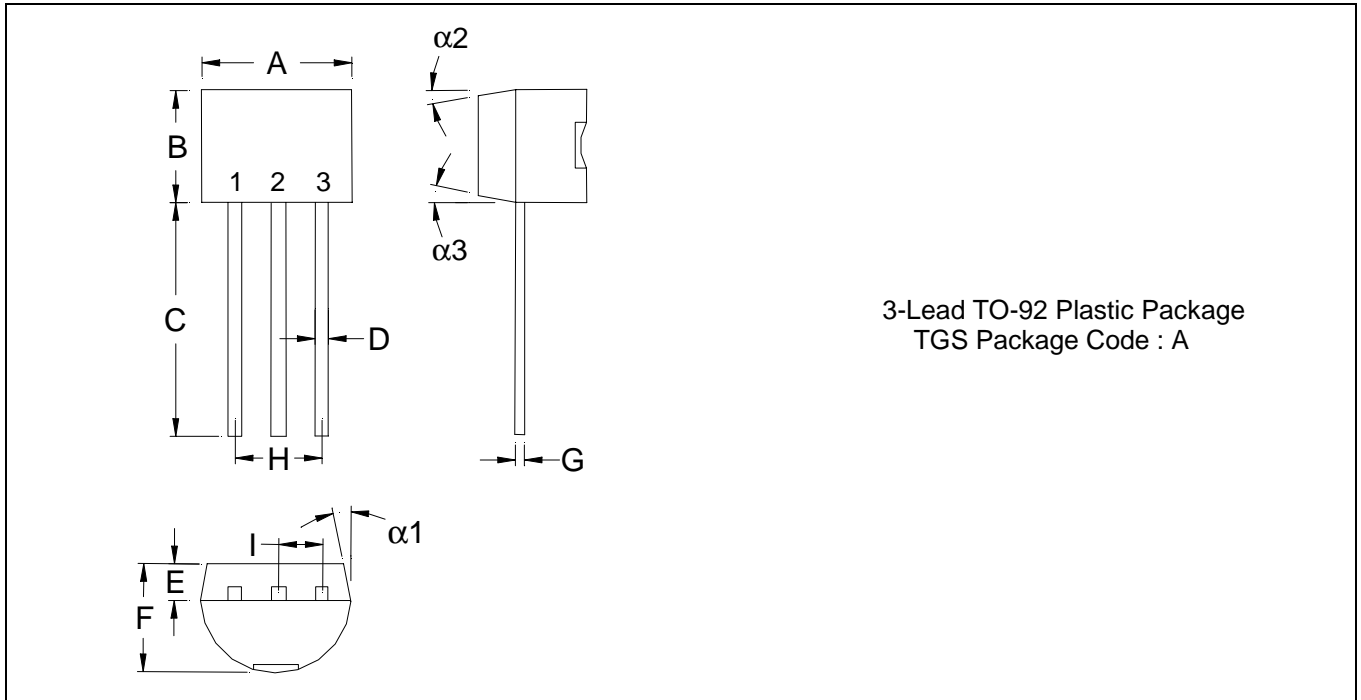


Characteristics Curve





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°