



2N5401

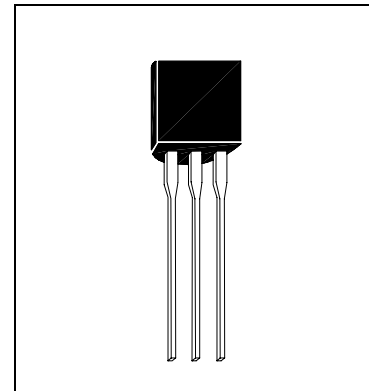
PNP EPITAXIAL PLANAR TRANSISTOR

Description

The 2N5401 is designed for general purpose applications requiring high breakdown voltages.

Features

- Complements to NPN Type 2N5551.
- High Collector-Emitter Breakdown Voltage. $V_{CEO}=150V$ (@ $I_C=1mA$)



Absolute Maximum Ratings

- Maximum Temperatures
Storage Temperature $-55\sim+150^{\circ}C$
Junction Temperature $+150^{\circ}C$ 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 160 V
 V_{CEO} Collector to Emitter Voltage 150 V
 V_{EBO} Emitter to Base Voltage 5 V
 I_C Collector Current 600 mA

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

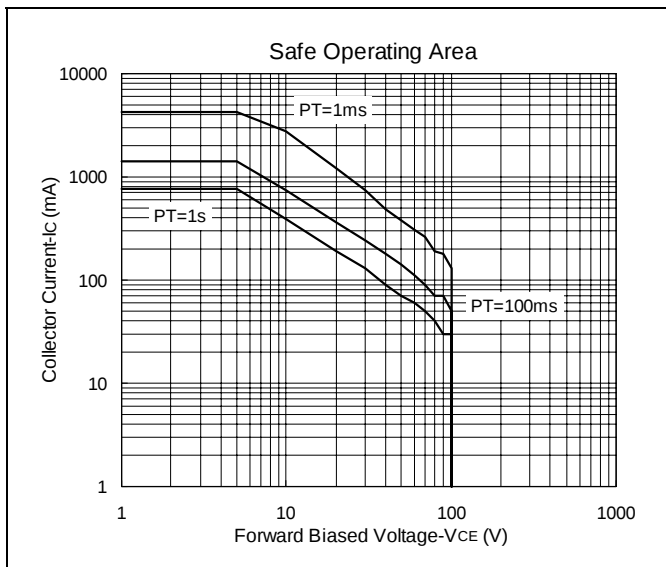
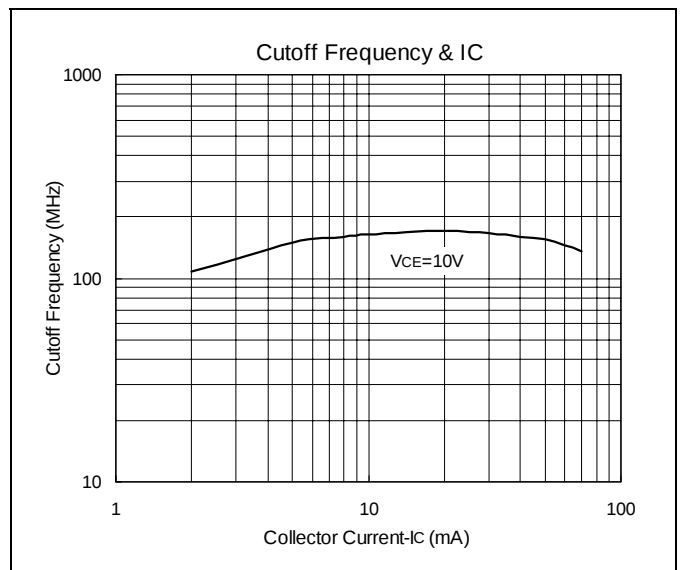
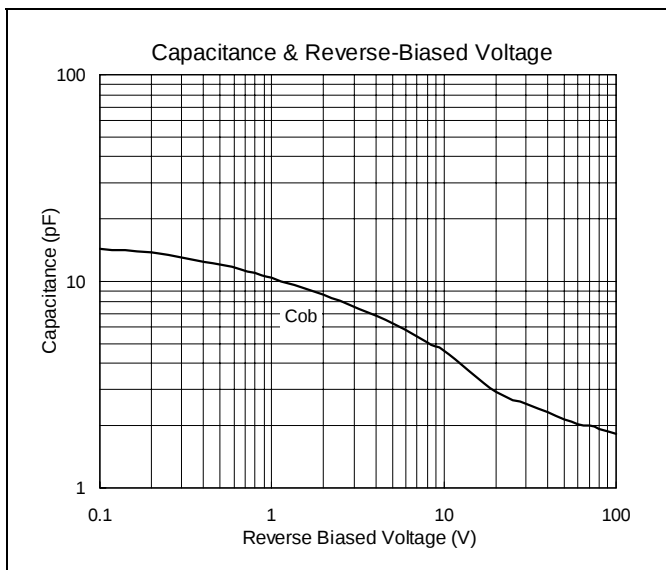
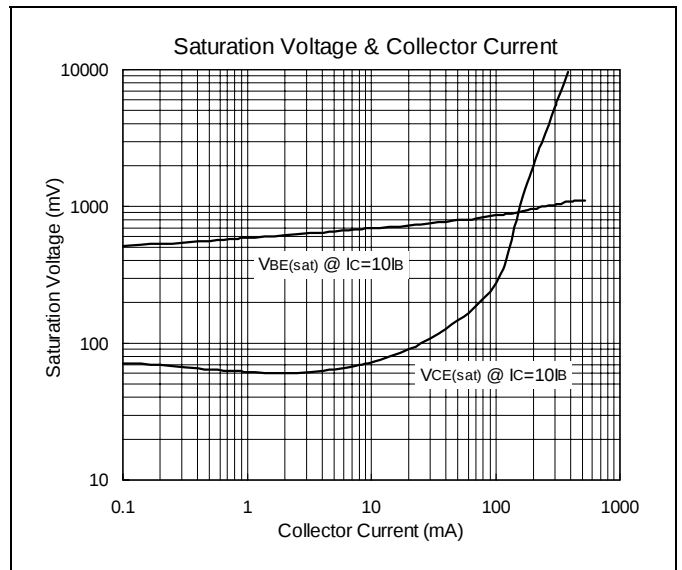
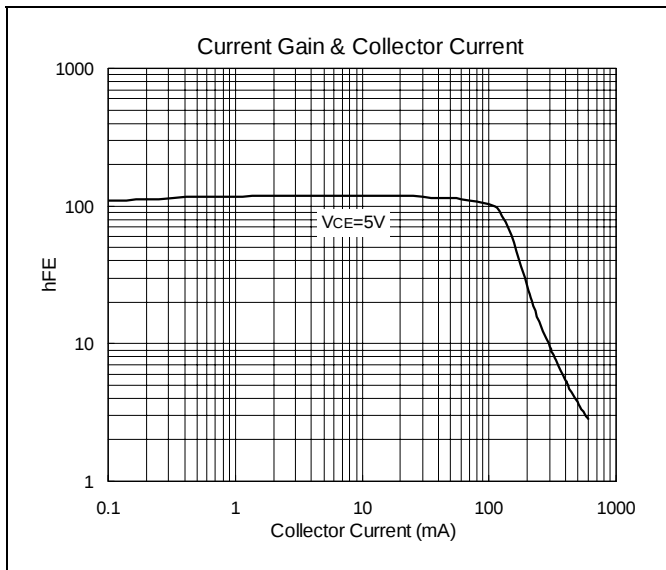
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVC_{BO}	160	-	-	V	$I_C=100\mu A$, $I_E=0$
BV_{CEO}	150	-	-	V	$I_C=1.0mA$, $I_B=0$
BVE_{BO}	5	-	-	V	$I_E=10\mu A$, $I_C=0$
IC_{BO}	-	-	50	nA	$V_{CB}=120V$, $I_E=0$
IE_{BO}	-	-	50	nA	$V_{EB}=3V$, $I_C=0$
$V_{CE(sat)1}$	-	-	0.2	V	$I_C=10mA$, $I_B=1.0mA$
$V_{CE(sat)2}$	-	-	0.5	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	$I_C=50mA$, $I_B=5mA$
$hFE1$	>50	-	-		$V_{CE}=5V$, $I_C=1mA$
$hFE2$	80	160	400		$V_{CE}=5V$, $I_C=10mA$
$hFE3$	50	-	-		$V_{CE}=5V$, $I_C=50mA$
fT	100	-	300	MHz	$V_{CE}=10V$, $I_C=10mA$, $f=100MHz$
Cob	-	-	6	pF	$V_{CB}=10V$, $f=1MHz$, $I_E=0$

Classification of $hFE2$

Rank	A	N	C
Range	80-200	100-240	160-400

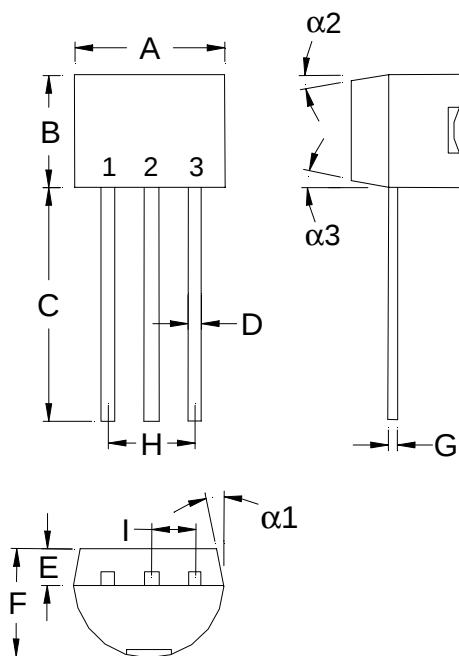


Characteristics Curve





TO-92 Dimension



3-Lead TO-92 Plastic Package
TGS Package Code : A

*: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	α1	-	*5°	-	*5°
E	-	*0.0500	-	*1.27	α2	-	*2°	-	*2°
F	0.1323	0.1480	3.36	3.76	α3	-	*2°	-	*2°