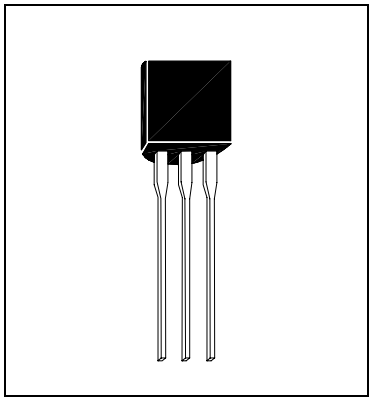
TIGER ELECTRONIC CO.,LTD

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. VCEO=150V (@IC=1mA)

Absolute Maximum Ratings

- Maximum Temperatures
  Storage Temperature ..... .-55~+150°C
  Junction Temperature ..... +150°C Maximum
- Maximum Power Dissipation
  Total Power Dissipation (Ta=25°C) ..... 625 mW
- Maximum Voltages and Currents (Ta=25°C)
  VCBO Collector to Base Voltage ..... 160 V
  VCEO Collector to Emitter Voltage ..... .150 V
  VEBO Emitter to Base Voltage ..... 5 V
  IC Collector Current ..... 600 mA

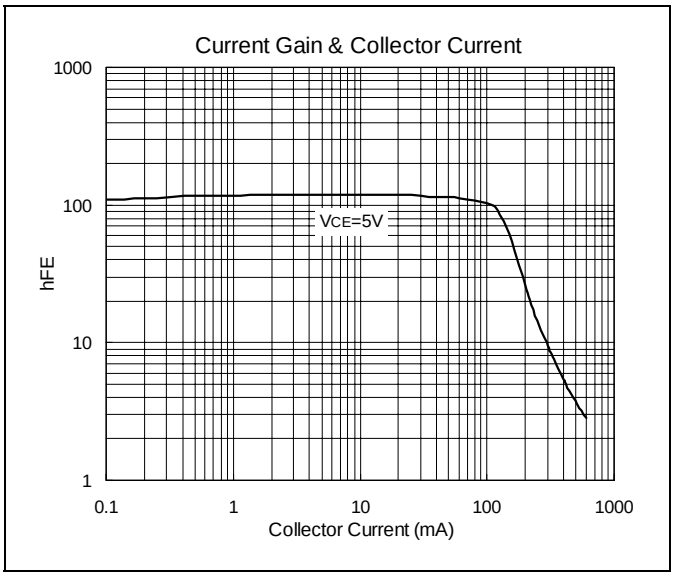
Characteristics (Ta=25°C)

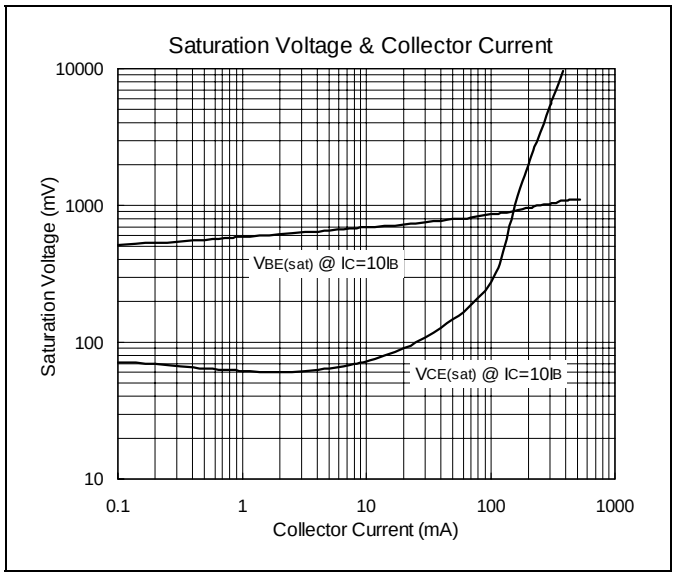
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	160	-	-	V	IC=100uA, IE=0
BVCEO	150	-	-	V	IC=1.0mA, IB=0
BVEBO	5	-	-	V	IE=10uA, IC=0
ICBO	-	-	50	nA	VCB=120V, IE=0
IEBO	-	-	50	nA	VEB=3V. IC=0
VCE(sat)1	-	-	0.2	V	IC=10mA, IB=1.0mA
VCE(sat)2	-	-	0.5	V	IC=50mA, IB=5mA
VBE(sat)1	-	-	1	V	IC=10mA, IB=1mA
VBE(sat)2	-	-	1	V	IC=50mA, IB=5mA
hFE1	>50	-	-		VCE=5V, IC=1mA
hFE2	80	160	400		VCE=5V, IC=10mA
hFE3	50	-	-		VCE=5V, IC=50mA
fT	100	-	300	MHz	VCE=10V, IC=10mA, f=100MHz
Cob	-	-	6	pF	VCB=10V, f=1MHz, IE=0

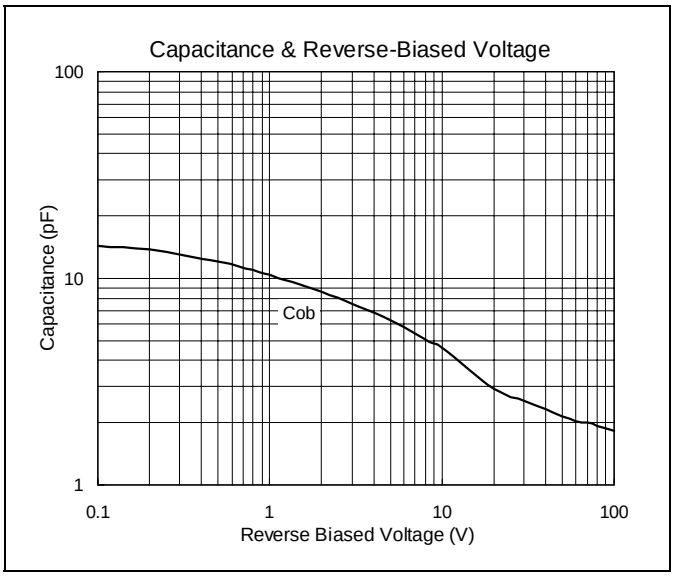
Classification of hFE2

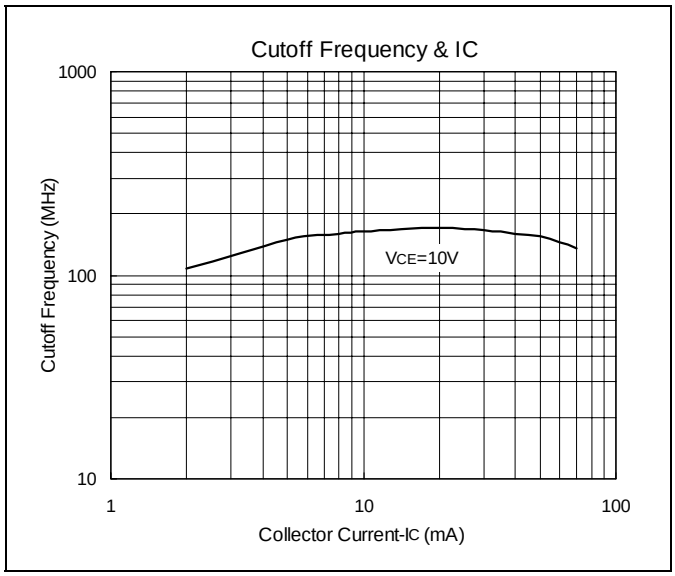
Rank	A	N	C
Range	80-200	100-240	160-400

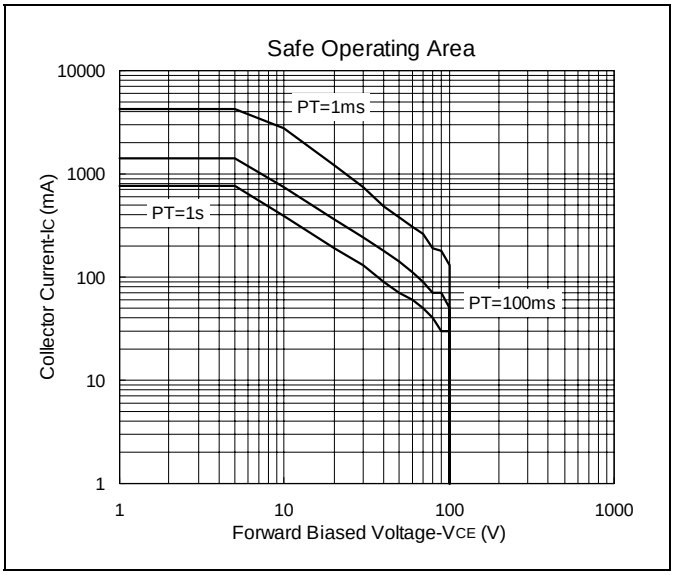
Characteristics Curve



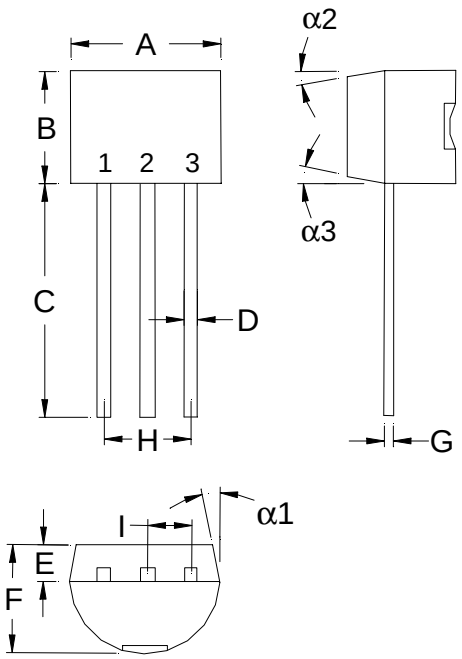








TO-92 Dimension



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°