High Voltage PNP Epitaxial Planar Transistor

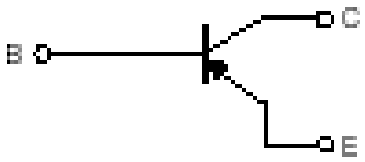
BTP6520A3

Features

- High Breakdown Voltage:BVCEO≥-350V
- Complementary to BTN6517A3

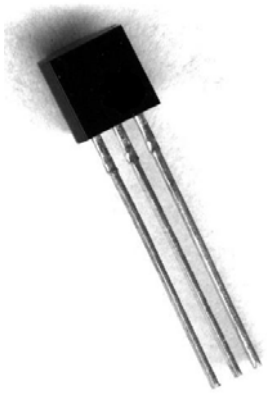
Symbol

BTP6520A3



B：Base
C：Collector
E：Emitter

TO-92



Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	VCBO	-350	V
Collector-Emitter Voltage	VCEO	-350	V
Emitter-Base Voltage	VEBO	-5	V
Collector Current---continuous	IC	-500	mA
Power Dissipation @TA=25℃	Pd	625	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55~+150	°C

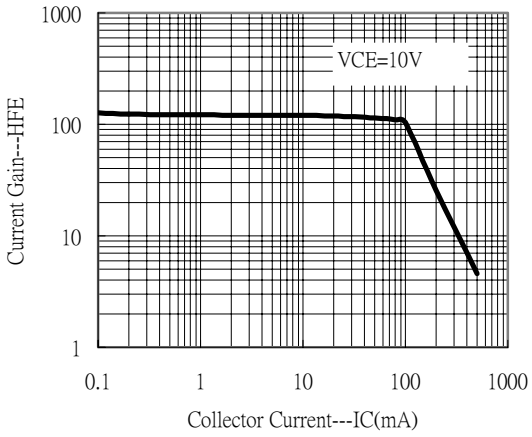
Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-350	-	-	V	IC=-100 μA
BVCEO	-350	-	-	V	IC=-1mA
BVEBO	-5	-	-	V	IE=-10 μA
ICBO	-	-	-50	nA	VCB=-250V
IEBO	-	-	-50	nA	VEB=-4V
VCE(sat) 1	-	-	-0.3	V	IC=-10mA, IB=-1mA
VCE(sat) 2	-	-	-0.35	V	IC=-20mA, IB=-2mA
*VCE(sat) 3	-	-	-0.5	V	IC=-30mA, IB=-3mA
*VCE(sat) 4	-	-	-1.0	V	IC=-50mA, IB=-5mA
VBE(sat) 1	-	-	-0.75	V	IC=-10mA, IB=-1mA
VBE(sat) 2	-	-	-0.85	V	IC=-20mA, IB=-2mA
*VBE(sat) 3	-	-	-0.9	V	IC=-30mA, IB=-3mA
VBE(on)	-	-	-2	V	VCE=-10V, IC=-100mA
hFE 1	20	-	-	-	VCE=-10V, IC=-1mA
hFE 2	30	-	-	-	VCE=-10V,IC=-10mA
*hFE 3	30	-	200	-	VCE=-10V,IC=-30mA
*hFE 4	20	-	200	-	VCE=-10V,IC=-50mA
*hFE 5	15	-	-	-	VCE=-10V,IC=-100mA
fT	40	-	200	MHz	VCE=-20V, IC=-10mA, f=20MHz
Cob	-	-	6	pF	VCB=-20V, IE=0A,f=1MHz

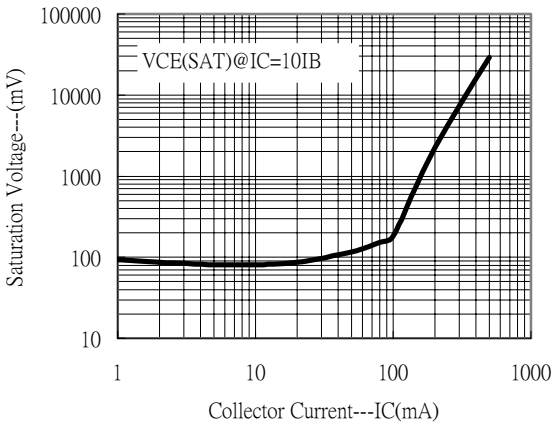
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

Characteristic Curves

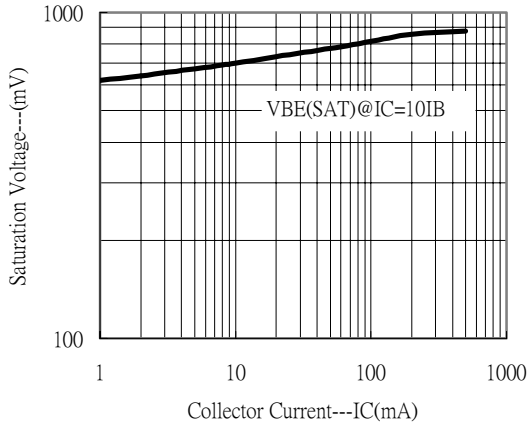
Current Gain vs Collector Current



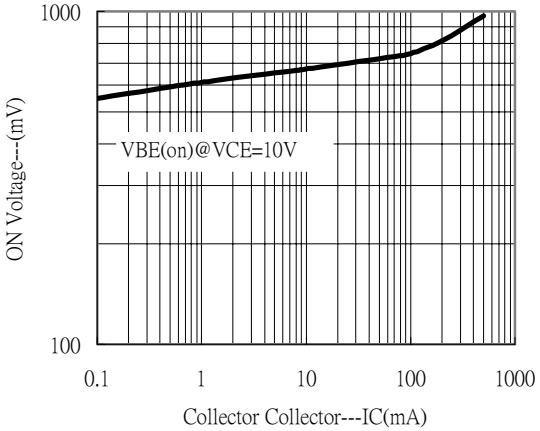
Saturation Voltage vs Collector Current



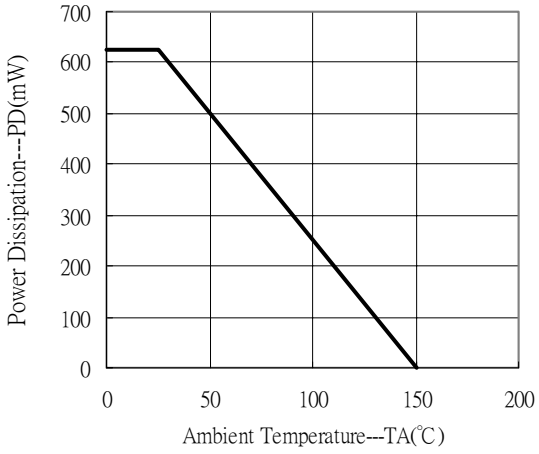
Saturation Voltage vs Collector Current



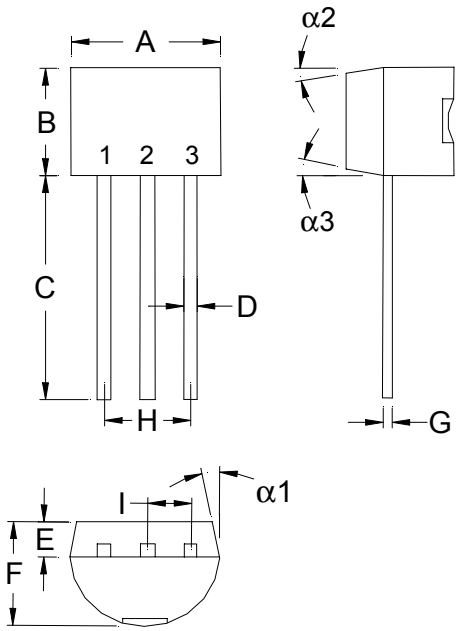
On voltage vs Collector Current



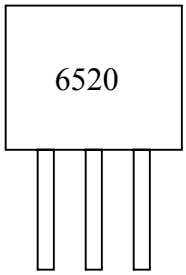
Power Derating Curve



TO-92 Dimension



Marking:



Style: Pin 1.Emitter 2.Base 3.Collector

3-Lead TO-92 Plastic Package
CYStek Package Code: A3

*: 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°

Notes: 1.Controlling dimension: millimeters.
2.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
3.If there is any question with packing specification or packing method, please contact your local CYStek sales office.

Material:

- Lead: 42 Alloy ; solder plating
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

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