

General Purpose PNP Epitaxial Planar Transistor

BTP8550A3

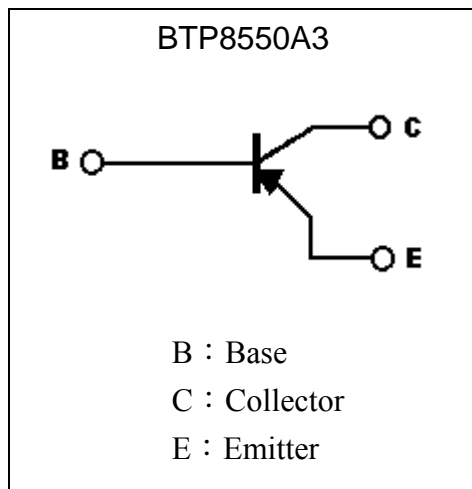
Description

The BTP8550A3 is designed for use in output amplifier of portable radios in class B push pull operation.

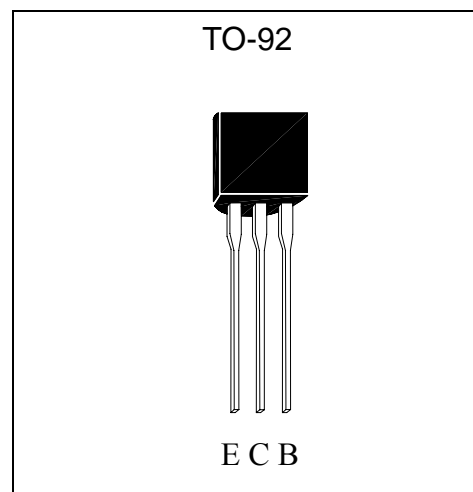
Features

- Large collector current , $I_C = -1.5A$
- Low $V_{CE(sat)}$
- Complementary to BTN8050A3
- Pb-free package

Symbol



Outline



Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-25	V
Emitter-Base Voltage	V_{EBO}	-6	V
Collector Current	I_C	-1.5	A
Base Current	I_B	-0.5	A
Power Dissipation	P_d	625	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	200	°C/W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~+150	°C



Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-40	-	-	V	IC=-100μA
BVCEO	-25	-	-	V	IC=-2mA
BVEBO	-6	-	-	V	IE=-100μA
ICBO	-	-	-100	nA	VCB=-35V
IEBO	-	-	-100	nA	VEB=-6V
*VCE(sat)	-	-	-0.5	V	IC=-800mA, IB=-80mA
*VBE(sat)	-	-	-1.2	V	IC=-800mA, IB=-80mA
*VBE(on)	-	-	-1	V	VCE=-1V, IC=-10mA
*hFE 1	100	-	-	-	VCE=-1V, IC=-5mA
*hFE 2	120	-	500	-	VCE=-1V, IC=-100mA
*hFE 3	40	-	-	-	VCE=-1V, IC=-800mA
fT	100	-	-	MHz	VCE=-10V, IC=-50mA, f=100MHz
Cob	-	-	20	pF	VCB=-10V, f=1MHz

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

Classification Of hFE 2

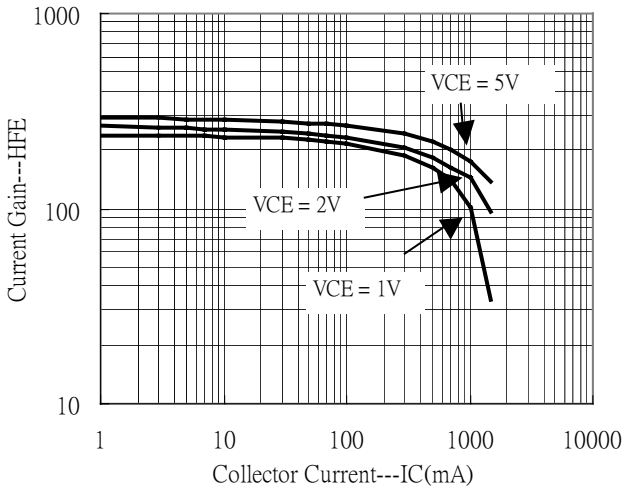
Rank	C	D	E
Range	120~200	160~320	250~500

Ordering Information

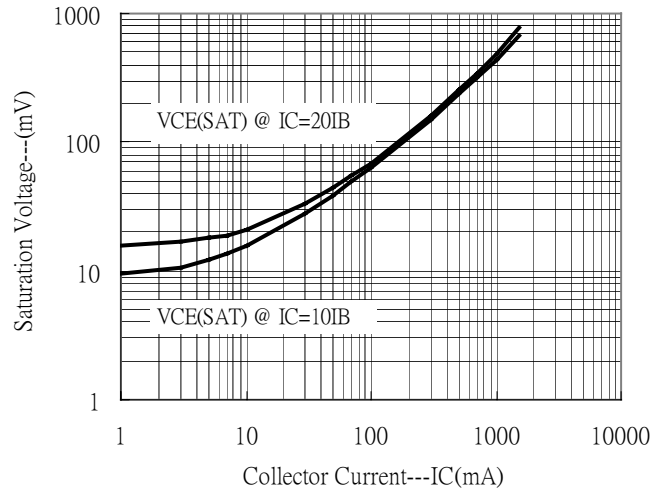
Device	Package	Shipping
BTP8550A3	TO-92 (Pb-free)	2000 pcs / Tape & Box

Characteristic Curves

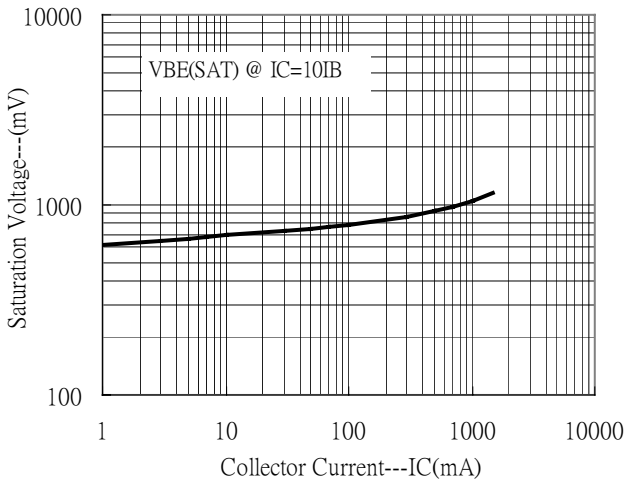
Current Gain vs Collector Current



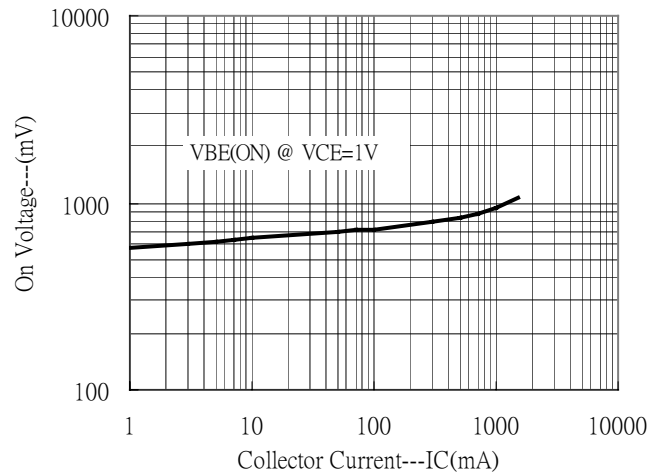
Saturation Voltage vs Collector Current



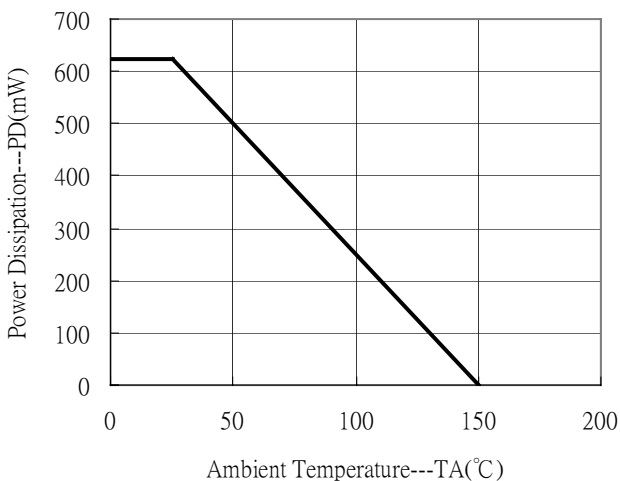
Saturation Voltage vs Collector Current



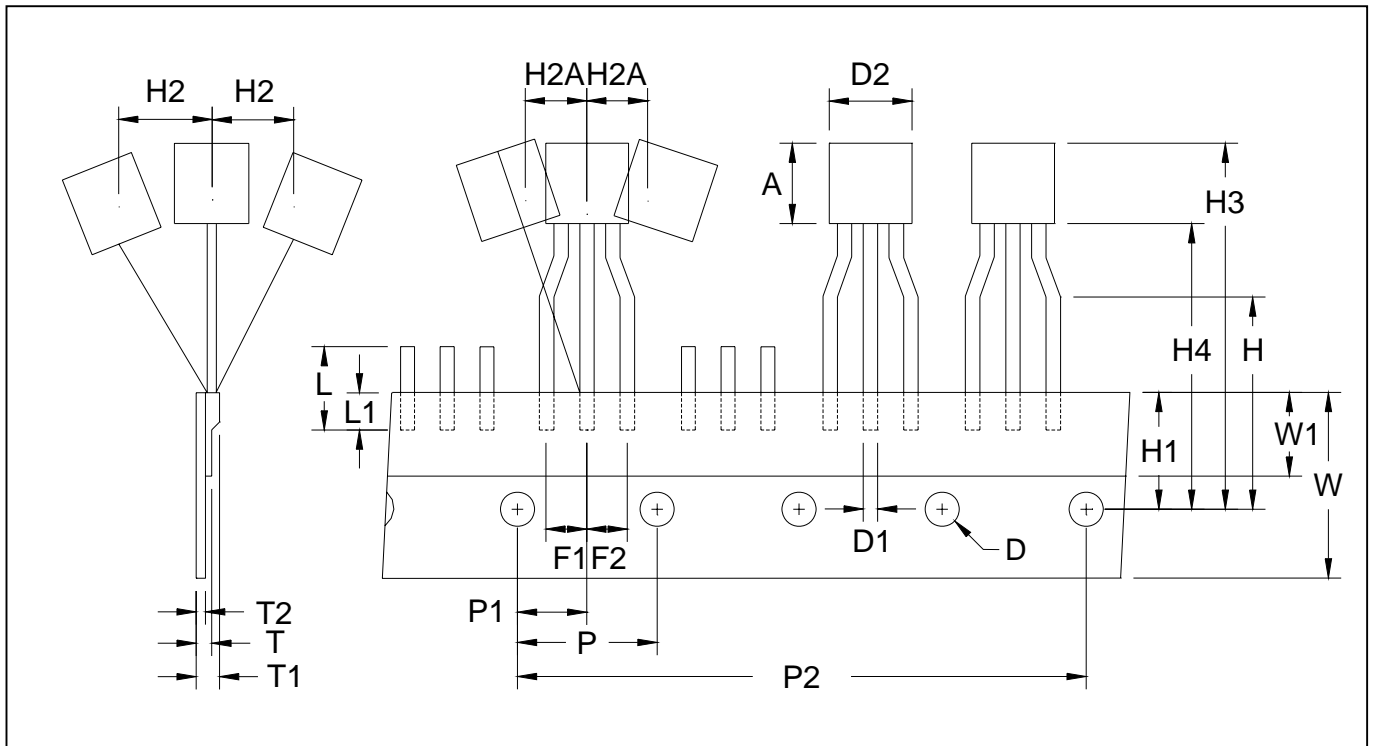
On Voltage vs Collector Current



Power Derating Curve

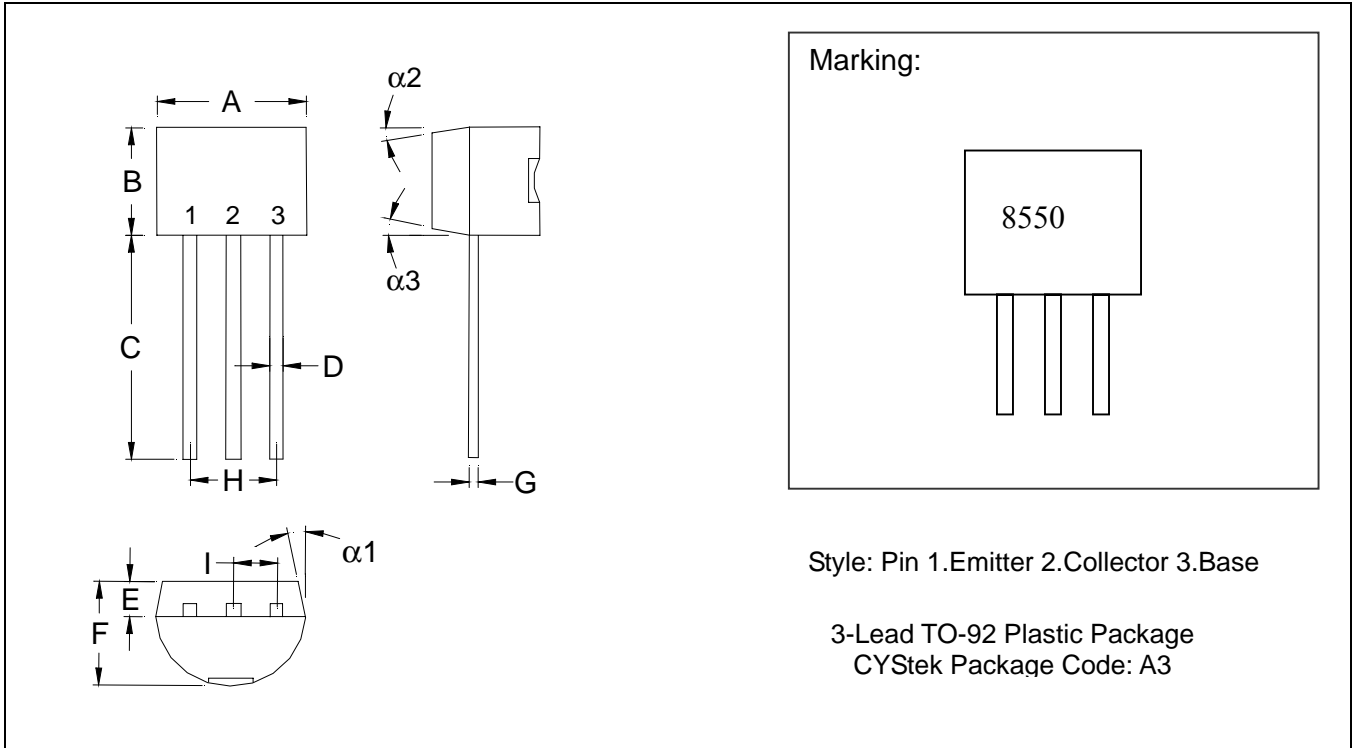


TO-92 Taping Outline



DIM	Item	Millimeters	
		Min.	Max.
A	Component body height	4.33	4.83
D	Tape Feed Diameter	3.80	4.20
D1	Lead Diameter	0.36	0.53
D2	Component Body Diameter	4.33	4.83
F1,F2	Component Lead Pitch	2.40	2.90
F1,F2	F1-F2	-	±0.3
H	Height Of Seating Plane	15.50	16.50
H1	Feed Hole Location	8.50	9.50
H2	Front To Rear Deflection	-	1
H2A	Deflection Left Or Right	-	1
H3	Component Height	-	27
H4	Feed Hole To Bottom Of Component	-	21
L	Lead Length After Component Removal	-	11
L1	Lead Wire Enclosure	2.50	-
P	Feed Hole Pitch	12.50	12.90
P1	Center Of Seating Plane Location	5.95	6.75
P2	4 Feed Hole Pitch	50.30	51.30
T	Over All Tape Thickness	-	0.55
T1	Total Taped Package Thickness	-	1.42
T2	Carrier Tape Thickness	0.36	0.68
W	Tape Width	17.50	19.00
W1	Adhesive Tape Width	5.00	7.00
-	20 pcs Pitch	253	255

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°

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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