

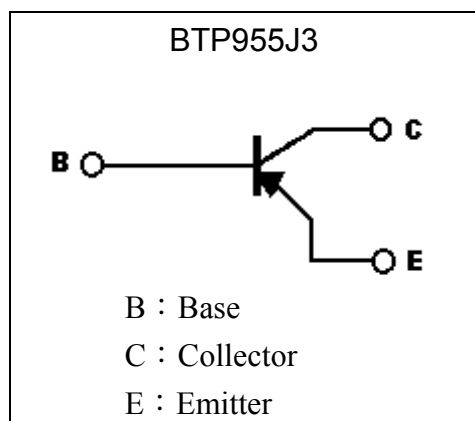
PNP Epitaxial Planar High Current (High Performance) Transistor

BTP955J3

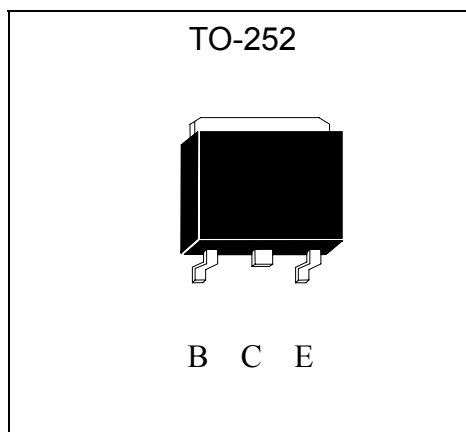
Features

- 4 Amps continuous current, up to 10 Amps peak current
- Very low saturation voltage
- Excellent gain characteristics specified up to 3 Amps
- Ptot=3Watts
- Extremely low equivalent on resistance, $R_{CE(SAT)}=90m\Omega$ at 3A
- Pb-free package

Symbol



Outline



Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	V_{CBO}	-120	V
Collector-Emitter Voltage	V_{CEO}	-100	V
Emitter-Base Voltage	V_{EBO}	-6	V
Continuous Collector Current	I_C	-4	A
Peak Collector Current	I_{CP}	-10 (Note 1)	A
Base Current	I_B	-1 (Note 2)	A
Power Dissipation	@Ta=25°C	1.75	W
	@Tc=25°C	20	W
Operating and Storage Temperature Range	$T_j ; T_{stg}$	-55 ~ +150	°C

Note : 1. Single Pulse , $P_w \leq 380\mu s$, Duty $\leq 2\%$.

2. When mounted on a PCB with the minimum pad size.

**Characteristics** (Ta=25°C, unless otherwise specified)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV _{CB0}	-120	-	-	V	I _C =-100μA
BV _{CER}	-100	-	-	V	I _C =-1μA, R _{BE} ≤1kΩ
*BV _{CEO}	-100	-	-	V	I _C =-10mA
BV _{EBO}	-6	-	-	V	I _E =-100μA
I _{CB0}	-	-	-50	nA	V _{CB} =-100V
I _{CER}	-	-	-50	nA	V _{CE} =-100V, R _{BE} ≤1kΩ
I _{EBO}	-	-	-10	nA	V _{EB} =-6V
*V _{CE(sat)1}	-	-40	-60	mV	I _C =-100mA, I _B =-5mA
*V _{CE(sat)2}	-	-70	-120	mV	I _C =-500mA, I _B =-50mA
*V _{CE(sat)3}	-	-110	-150	mV	I _C =-1A, I _B =-100mA
*V _{CE(sat)4}	-	-270	-370	mV	I _C =-3A, I _B =-300mA
*V _{BE(sat)}	-	-930	-1110	mV	I _C =-3A, I _B =-300mA
*V _{BE(on)}	-	-830	-950	mV	V _{CE} =-5V, I _C =-3A
h _{FE1}	100	200	-	-	V _{CE} =-5V, I _C =-10mA
h _{FE2}	100	200	300	-	V _{CE} =-5V, I _C =-1A
*h _{FE3}	75	140	-	-	V _{CE} =-5V, I _C =-3A
*h _{FE4}	-	10	-	-	V _{CE} =-5V, I _C =-10A
f _T	-	110	-	MHz	V _{CE} =-10V, I _C =-100mA, f=50MHz
C _{ob}	-	40	-	pF	V _{CB} =-20V, f=1MHz
ton		68		ns	I _C =-1A, I _{B1} =-100mA, I _{B2} =100mA,
toff		1030		ns	V _{CC} =-50V

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

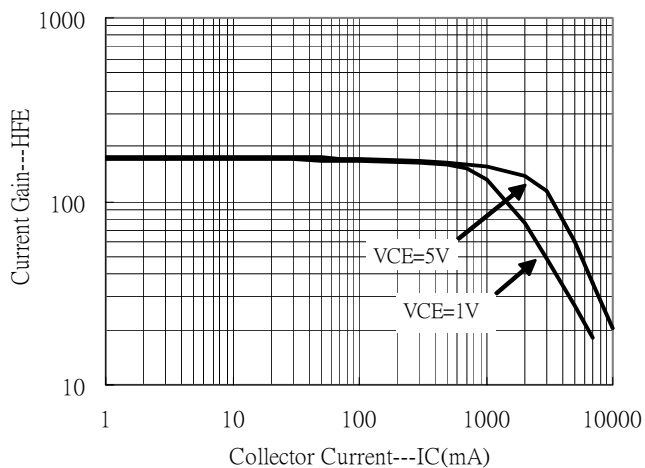
Ordering Information

Device	Package	Shipping	Marking
BTP955J3	TO-252 (Pb-free)	2500 pcs / Tape & Reel	P955

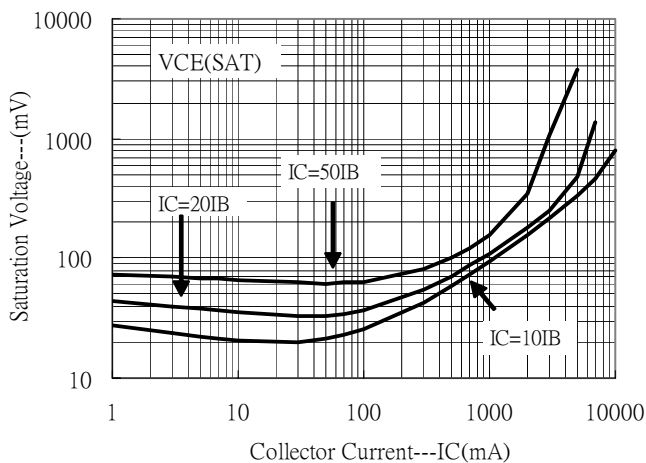


Characteristic Curves

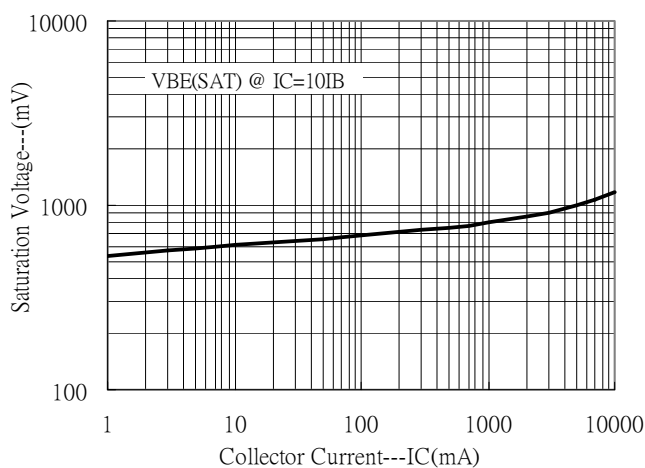
Current Gain vs Collector Current



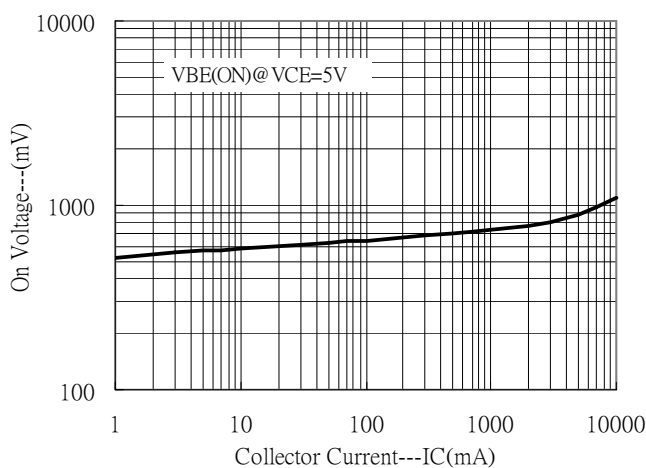
Saturation Voltage vs Collector Current



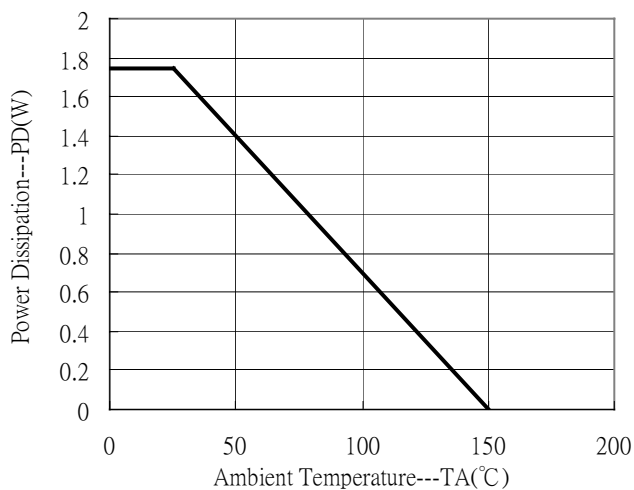
Saturation Voltage vs Collector Current



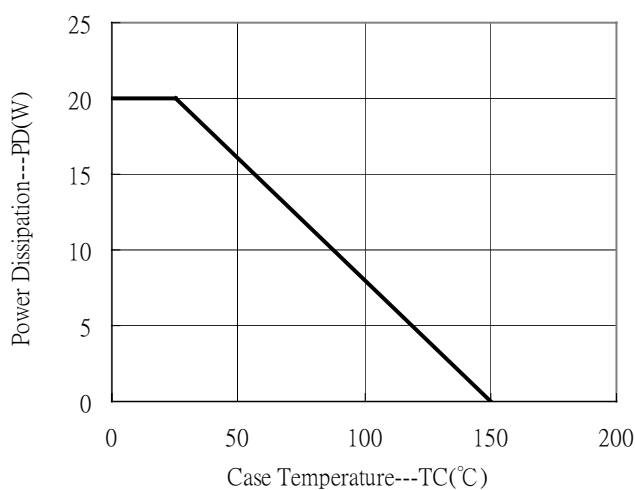
On Voltage vs Collector Current



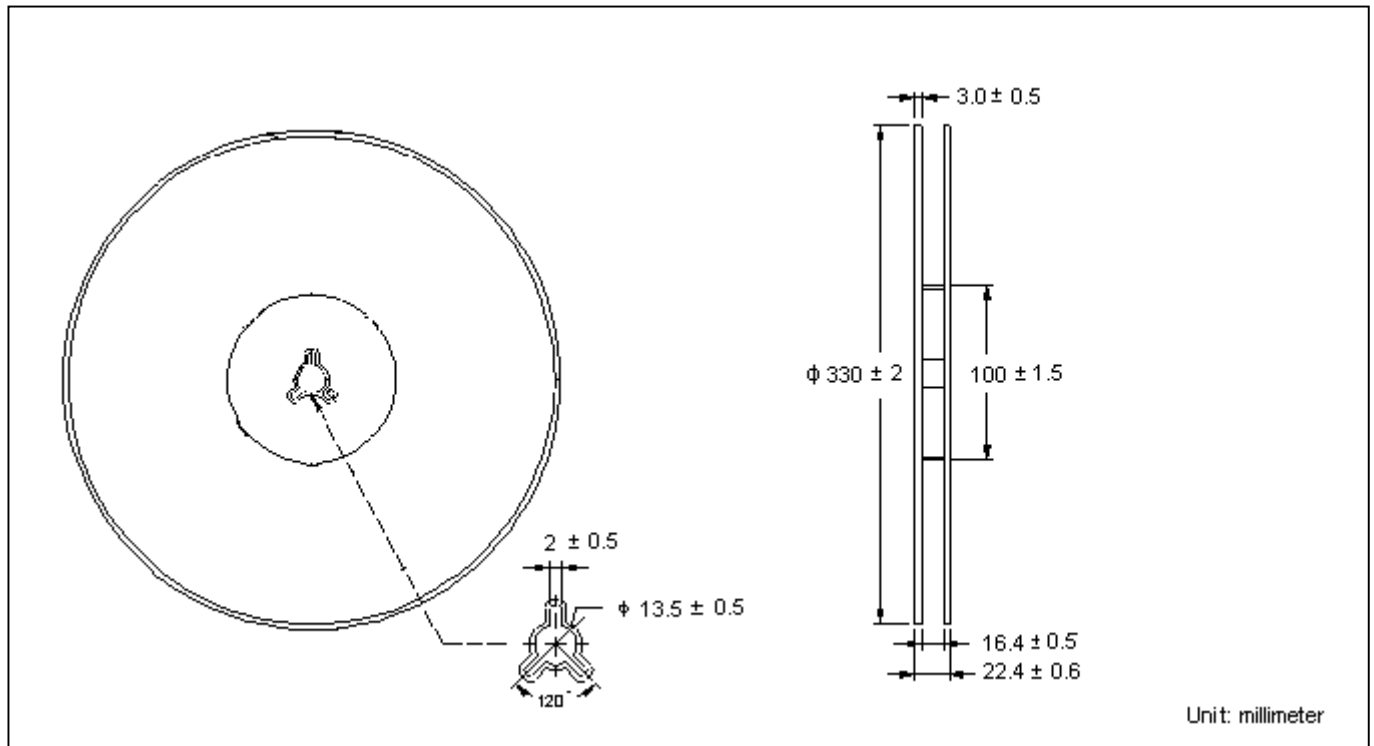
Power Derating Curve



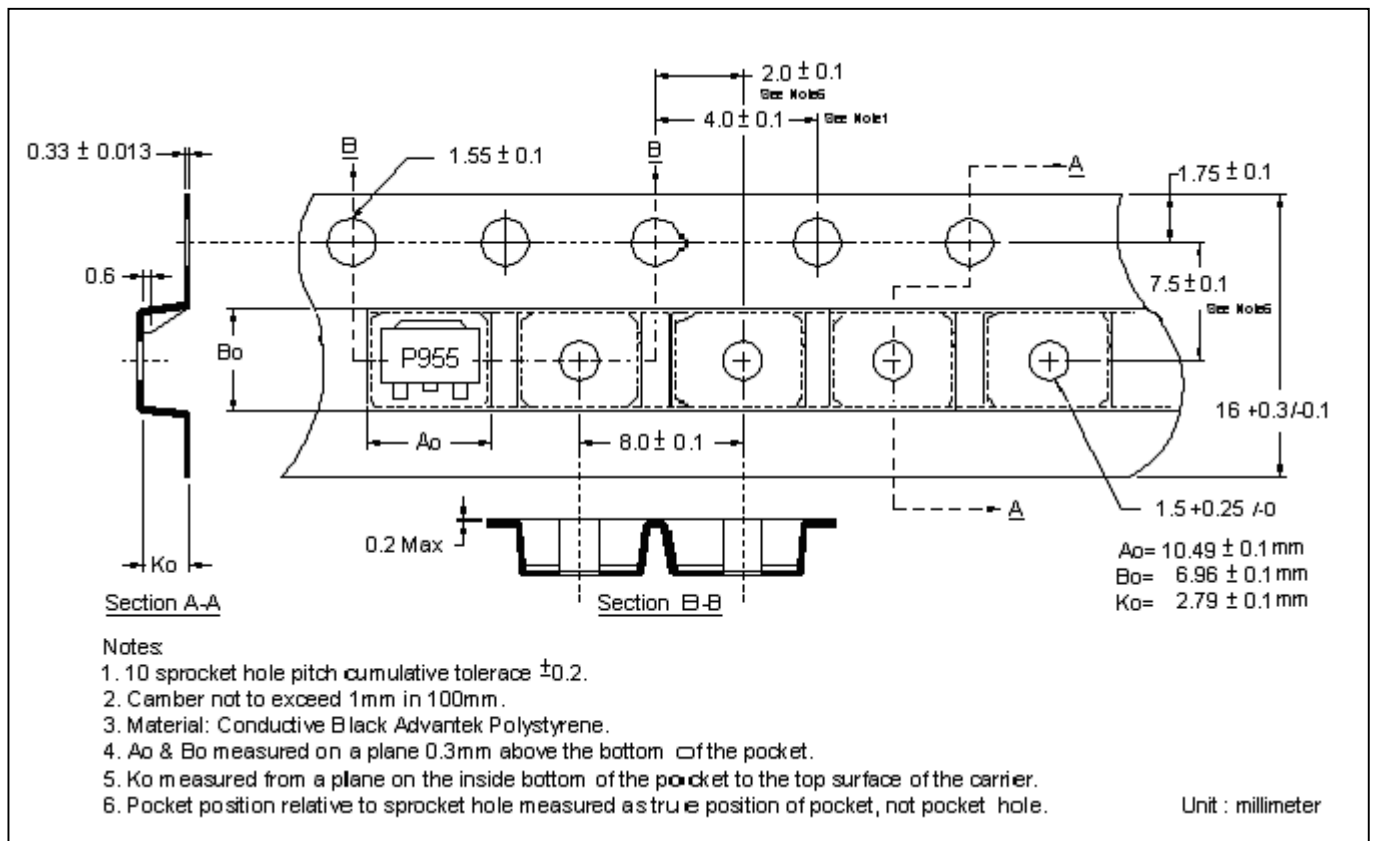
Power Derating Curve



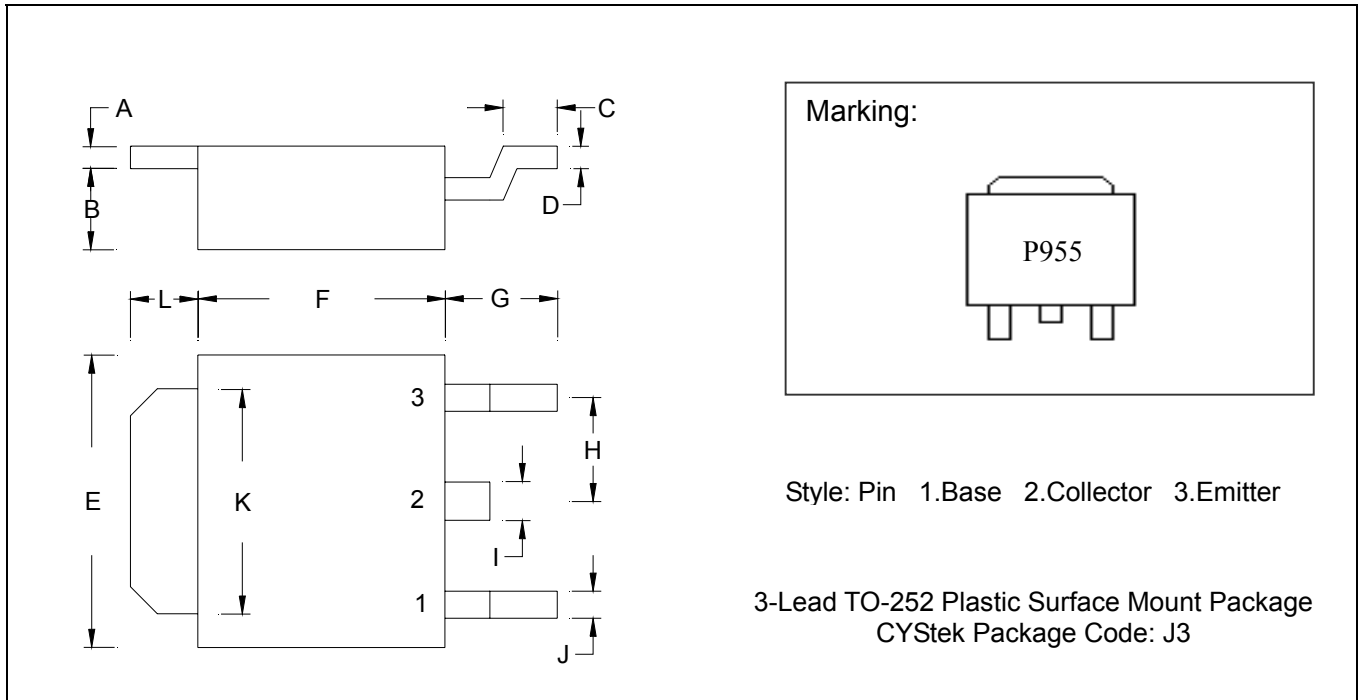
Reel Dimension



Carrier Tape Dimension



TO-252 Dimension



*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.0177	0.0217	0.45	0.55	G	0.0866	0.1102	2.20	2.80
B	0.0650	0.0768	1.65	1.95	H	-	*0.0906	-	*2.30
C	0.0354	0.0591	0.90	1.50	I	-	0.0354	-	0.90
D	0.0177	0.0236	0.45	0.60	J	-	0.0315	-	0.80
E	0.2520	0.2677	6.40	6.80	K	0.2047	0.2165	5.20	5.50
F	0.2125	0.2283	5.40	5.80	L	0.0551	0.0630	1.40	1.60

- 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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