

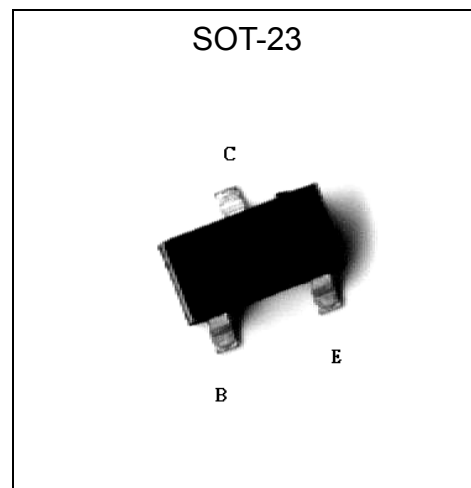
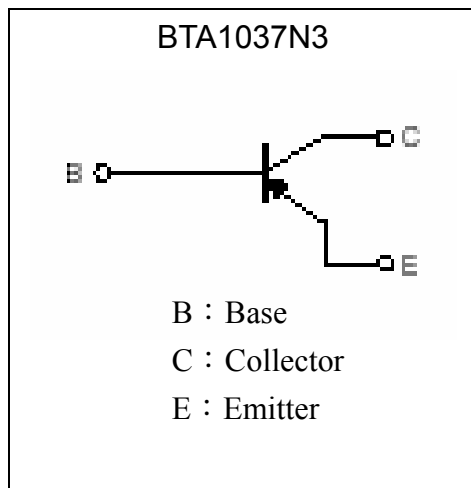
General Purpose PNP Epitaxial Planar Transistor

BTA1037N3

Description

- The BTA1037N3 is designed for using in driver stage of AF amplifier and general purpose amplification.
- Excellent hFE linearity
- Complementary to BTC2412N3.

Equivalent Circuit



Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	VCBO	-60	V
Collector-Emitter Voltage	VCEO	-50	V
Emitter-Base Voltage	VEBO	-6	V
Collector Current	IC	-150	mA
Power Dissipation	Pd	225	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55~+150	°C

**Characteristics** (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-60	-	-	V	IC=-50uA
BVCEO	-50	-	-	V	IC=-1mA
BVEBO	-6	-	-	V	IE=-50uA
ICBO	-	-	-0.1	uA	VCB=-60V
IEBO	-	-	-0.1	uA	VEB=-6V
*VCE(sat)	-	-0.2	-0.5	V	IC=-50mA, IB=-5mA
*hFE	120	-	820		VCE=-6V, IC=-1mA
fT	60	140	-	MHz	VCE=-12V, IC=-2mA, f=30MHz
Cob	-	4.0	5.0	pF	VCB=-12V, f=1MHz

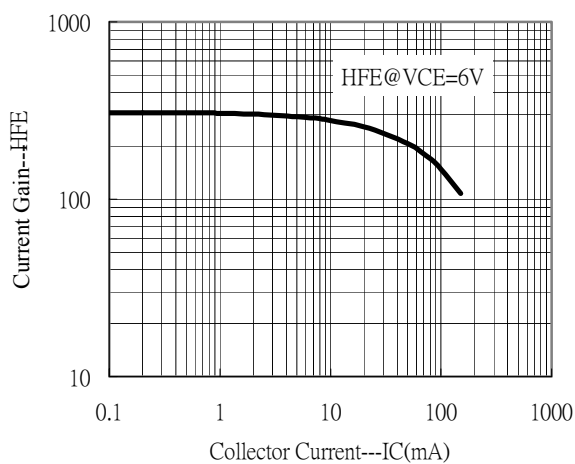
*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

Classification Of hFE

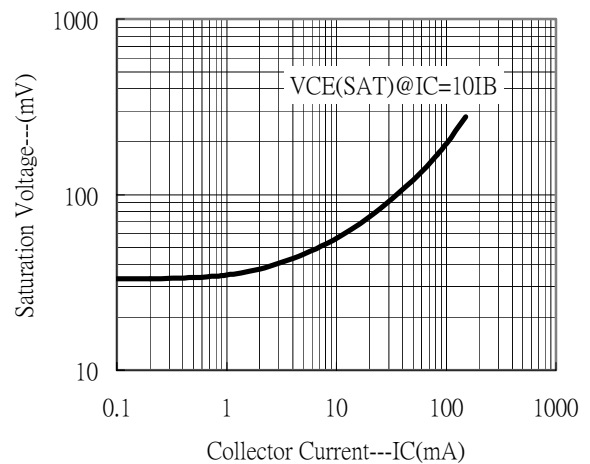
Rank	Q	R	S	T
Range	120-270	180-390	270-560	410-820

Characteristic Curves

Current Gain vs Collector Current

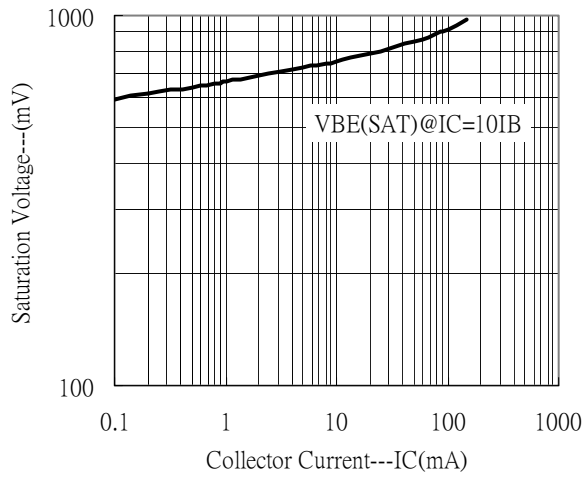


Saturation Voltage vs Collector Current

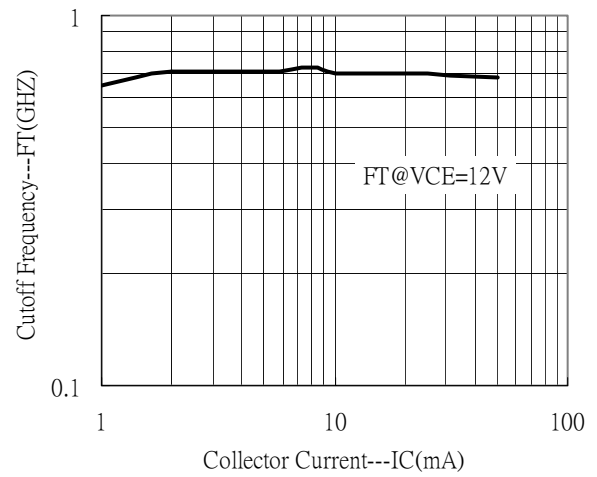




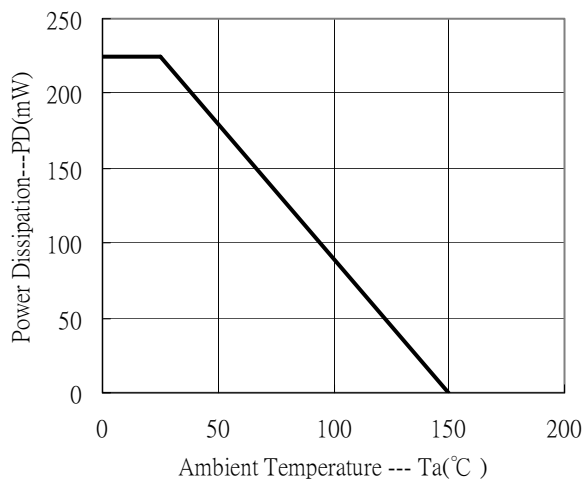
Saturation Voltage vs Collector Current



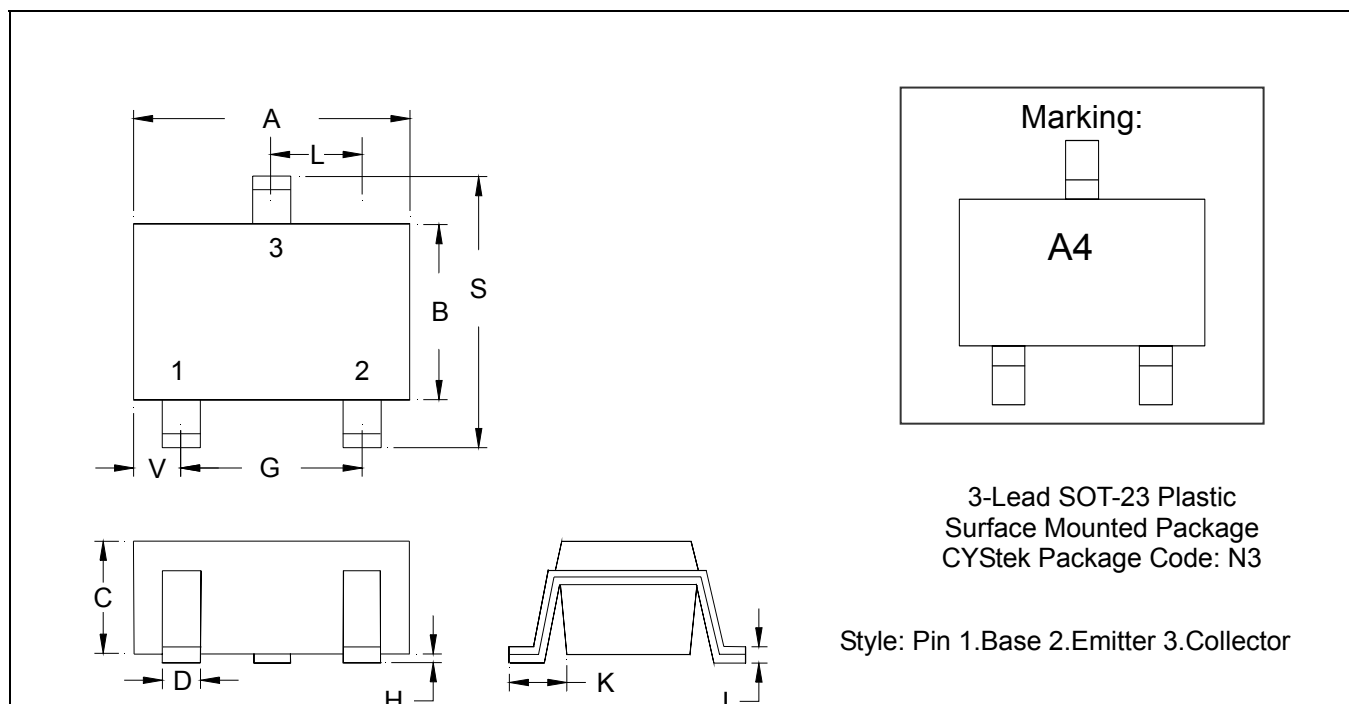
Cutoff Frequency vs Collector Current



PD - T_a



SOT-23 Dimension



*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1102	0.1204	2.80	3.04	J	0.0034	0.0070	0.085	0.177
B	0.0472	0.0630	1.20	1.60	K	0.0128	0.0266	0.32	0.67
C	0.0335	0.0512	0.89	1.30	L	0.0335	0.0453	0.85	1.15
D	0.0118	0.0197	0.30	0.50	S	0.0830	0.1083	2.10	2.75
G	0.0669	0.0910	1.70	2.30	V	0.0098	0.0256	0.25	0.65
H	0.0005	0.0040	0.013	0.10					

Notes: 1.Dimension and tolerance based on our Spec. dated Feb. 18,2002.

2.Controlling dimension: millimeters.

3.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.

4.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

Important Notice:

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of CYStek.
- CYStek reserves the right to make changes to its products without notice.
- CYStek **semiconductor products are not warranted to be suitable for use in Life-Support Applications, or systems.**
- CYStek assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.