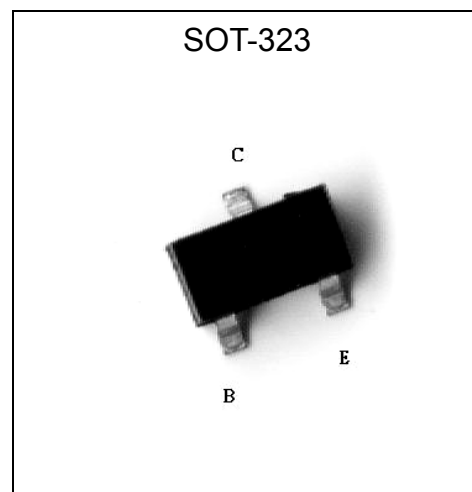
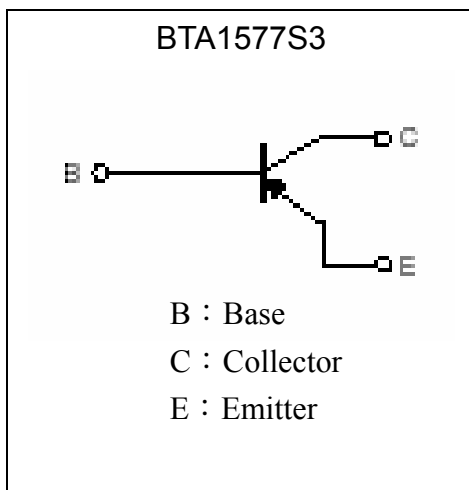


General Purpose PNP Epitaxial Planar Transistor

BTA1577S3

Description

- The BTA1577S3 is designed for use in driver stage of AF amplifier and general purpose amplification.
- Large IC . IC Max . = -0.6A
- Low Vce(set). Edeal for low-Voltage operation
TYP.Vce(set) = 0.2V at IC/IB = 300mA / 30mA
- Complementary to BTC4097S3.

Equivalent Circuit

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	VCBO	-40	V
Collector-Emitter Voltage	VCEO	-32	V
Emitter-Base Voltage	VEBO	-5	V
Collector Current	IC	-0.6	A
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	-40	-101	-	V	IC=-10uA
BVCEO	-32	-62	-	V	IC=-1mA
BVEBO	-5	-8.9	-	V	IE=-100uA
ICBO	-	-0.03	-1.0	uA	VCB=-20V
IEBO	-	0	-1.0	uA	VEB=-4V
*VCE(sat)	-	-0.25	-0.5	V	IC=-100mA, IB=-10mA
*hFE	82	212	390		VCE=-3V, IC=-100mA
fT	-	200	-	MHz	VCE=-10V, IC=-1mA, f=100MHz
Cob	-	7	-	pF	VCB=-10V, f=1MHz

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

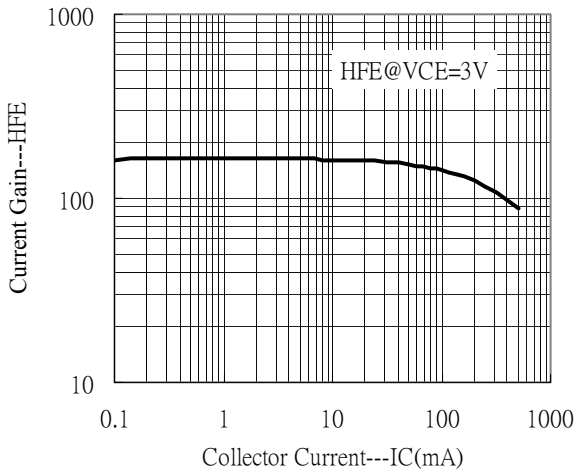
Classification Of hFE1

Rank	P	Q	R
Range	82~180	120~270	180~390

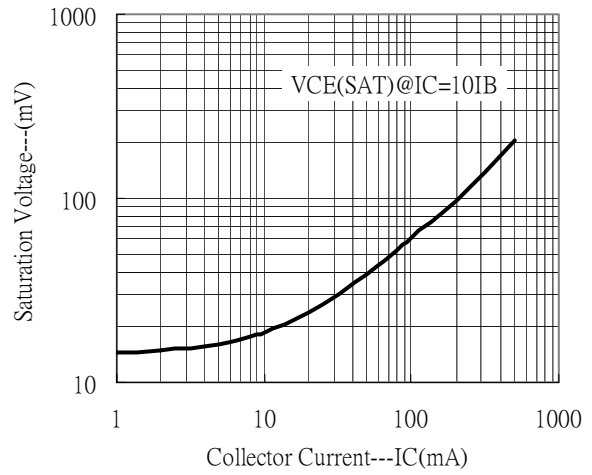


Characteristic Curves

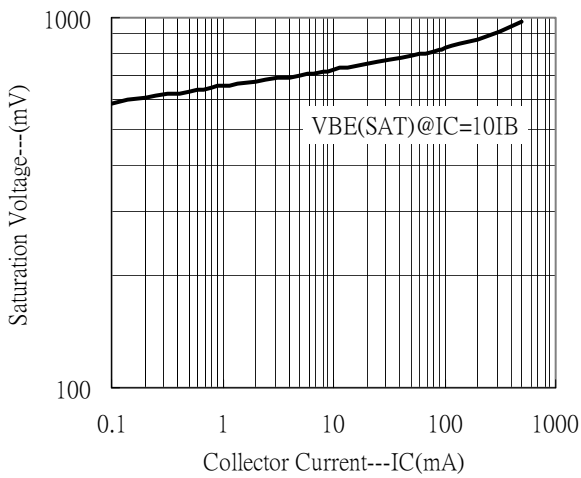
Current Gain vs Collector Current



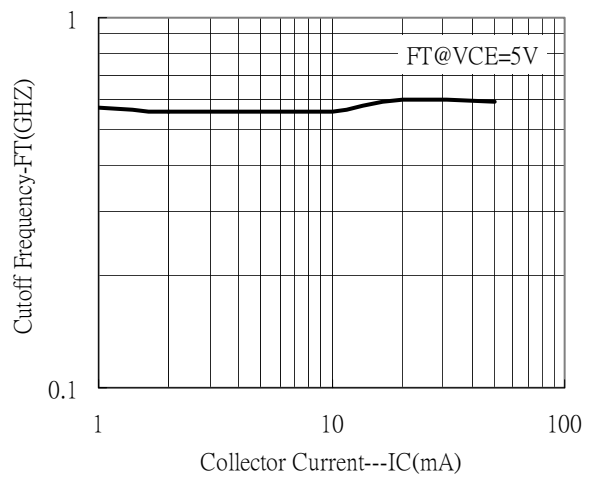
Saturation Voltage vs Collector Current



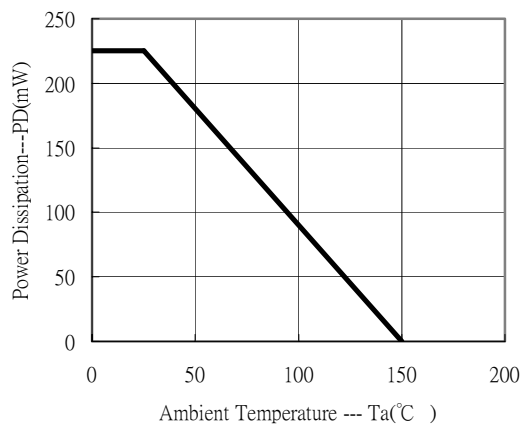
Saturation Voltage vs Collector Current



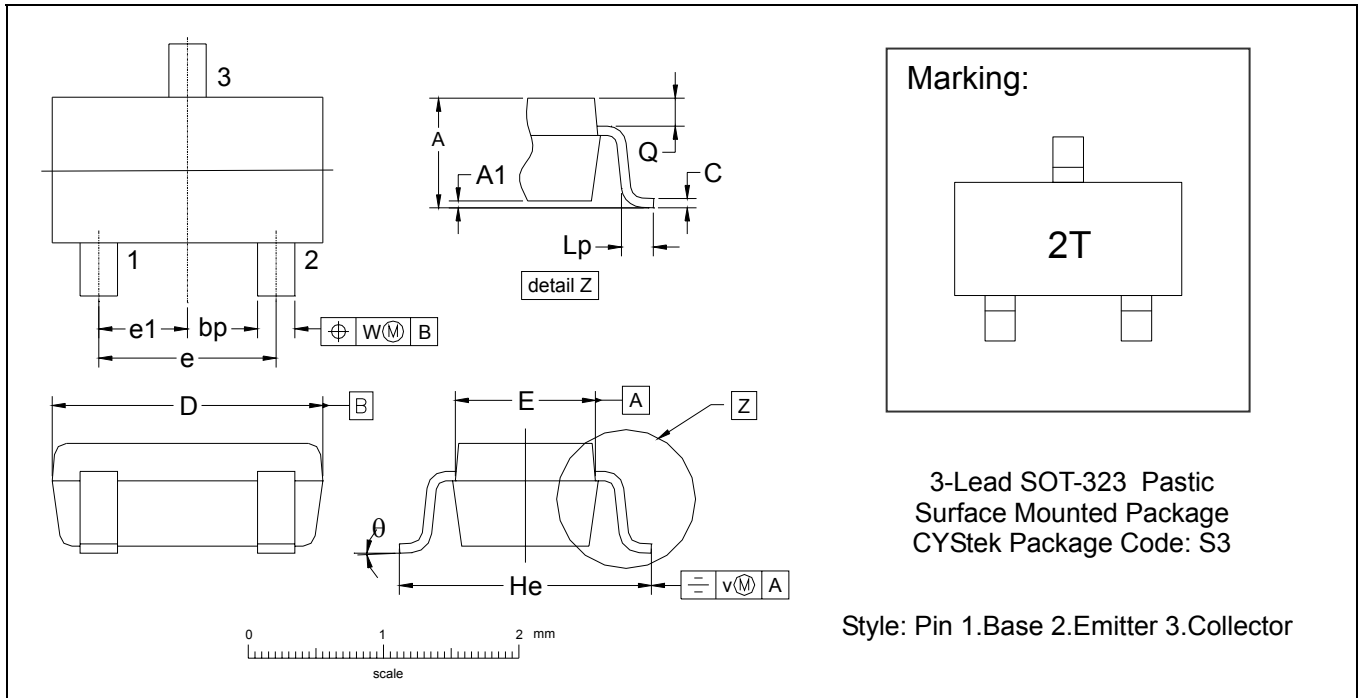
Cutoff Frequency vs Collector Current



PD - Ta



SOT-323 Dimension



*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.0315	0.0433	0.80	1.10	e1	0.0256	-	0.65	-
A1	0.0000	0.0039	0.00	0.10	He	0.0787	0.0886	2.00	2.25
bp	0.0118	0.0157	0.30	0.40	Lp	0.0059	0.0177	0.15	0.45
C	0.0039	0.0098	0.10	0.25	Q	0.0051	0.0091	0.13	0.23
D	0.0709	0.0866	1.80	2.20	v	0.0079	-	0.2	-
E	0.0453	0.0531	1.15	1.35	w	0.0079	-	0.2	-
e	0.0512	-	1.3	-	θ	-	-	10°	0°

Notes: 1.Dimension and tolerance based on our Spec. dated Feb. 27.002.
 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.