

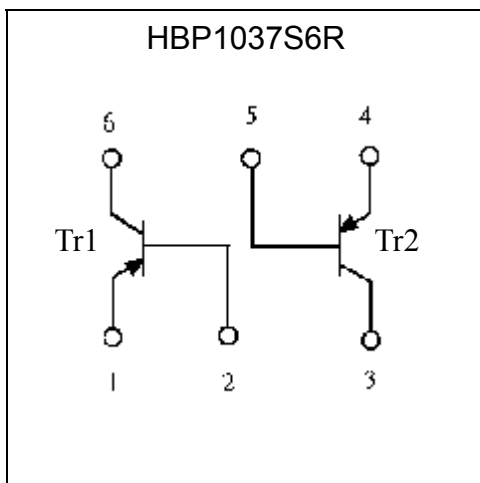
General Purpose PNP Epitaxial Planar Transistors (dual transistors)

HBP1037S6R

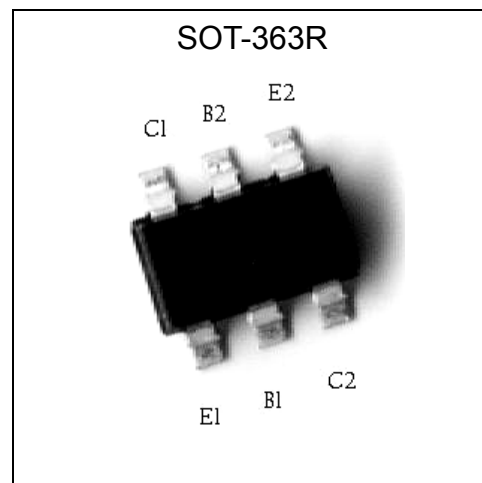
Features

- Two BTA1037 chips in a SOT-363R package.
- Mounting possible with SOT-323 automatic mounting machines.
- Transistor elements are independent, eliminating interference.
- Mounting cost and area can be cut in half.
- Excellent hFE linearity
- Complementary to HBN2412S6R.
- Pb-free package

Equivalent Circuit



Outline



The following characteristics apply to both Tr1 and Tr2

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	V _{CB0}	-60	V
Collector-Emitter Voltage	V _{CEO}	-50	V
Emitter-Base Voltage	V _{EB0}	-6	V
Collector Current	I _C	-150	mA
Power Dissipation	P _d	200(total) *1	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55~+150	°C

Note : *1 150mW per element must not be exceeded

**Characteristics (Ta=25°C)**

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-60	-	-	V	IC=-50μA
BVCEO	-50	-	-	V	IC=-1mA
BVEBO	-6	-	-	V	IE=-50μA
ICBO	-	-	-0.1	μA	VCB=-60V
IEBO	-	-	-0.1	μA	VEB=-6V
*VCE(sat)	-	-0.2	-0.5	V	IC=-50mA, IB=-5mA
*hFE	200	-	560		VCE=-6V, IC=-1mA
fT	80	180	-	MHz	VCE=-10V, IC=-1mA, f=100MHz
Cob	-	2	3.5	pF	VCB=-10V, f=1MHz

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

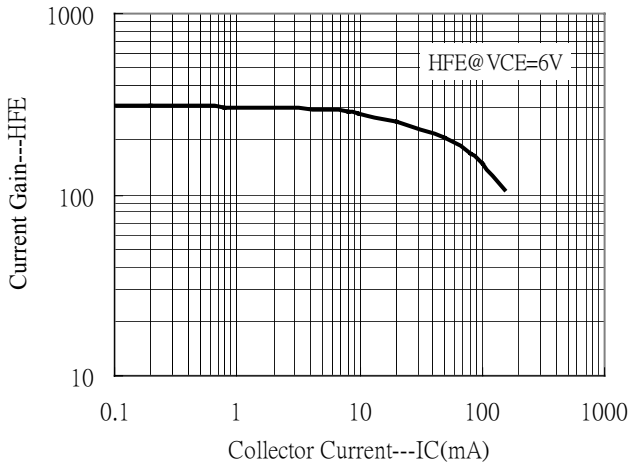
Ordering Information

Device	Package	Shipping	Marking
HBP1037S6R	SOT-363 (Pb-free)	3000 pcs / Tape & Reel	A2

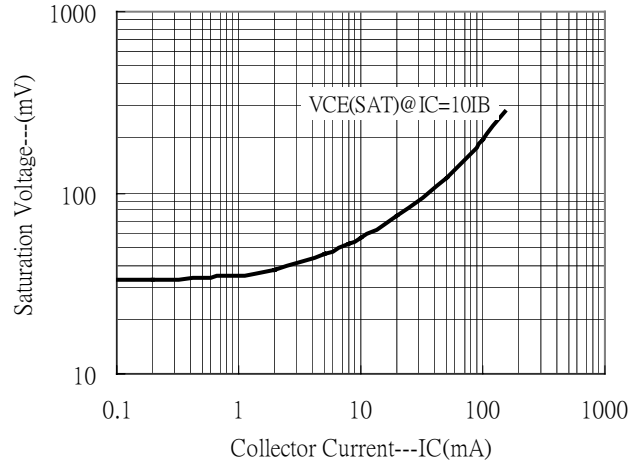


Characteristic Curves

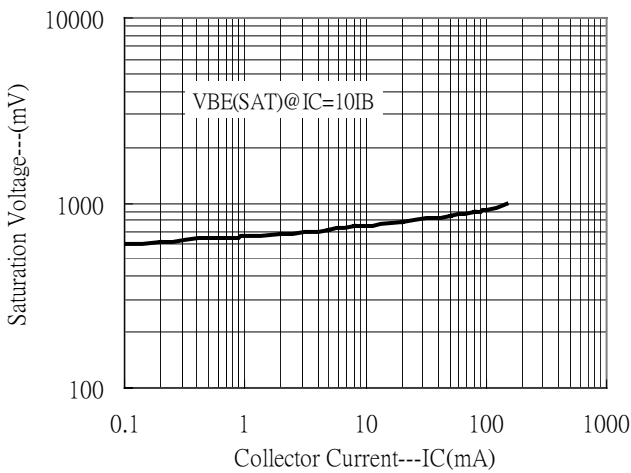
Current Gain vs Collector Current



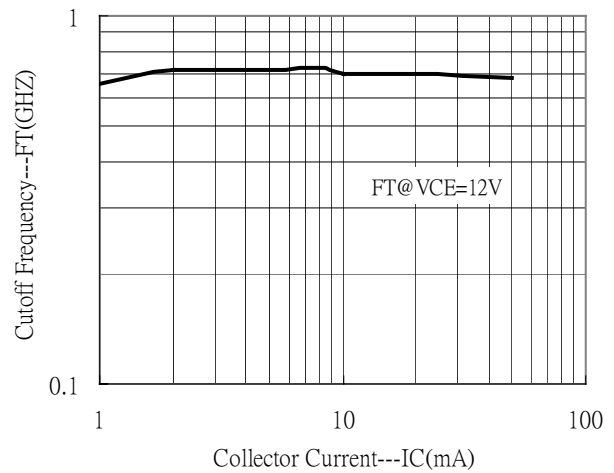
Saturation Voltage vs Collector Current



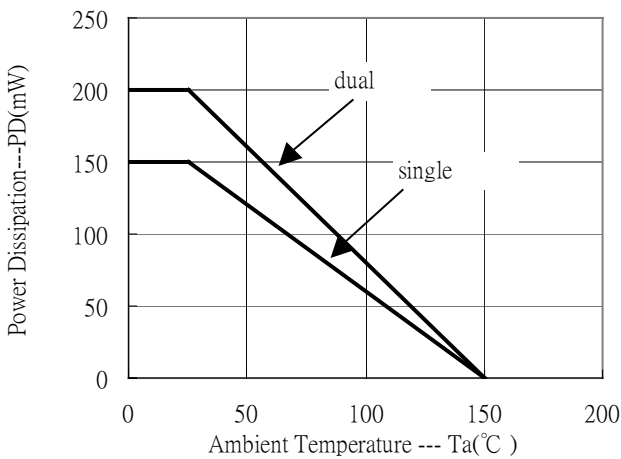
Saturation Voltage vs Collector Current



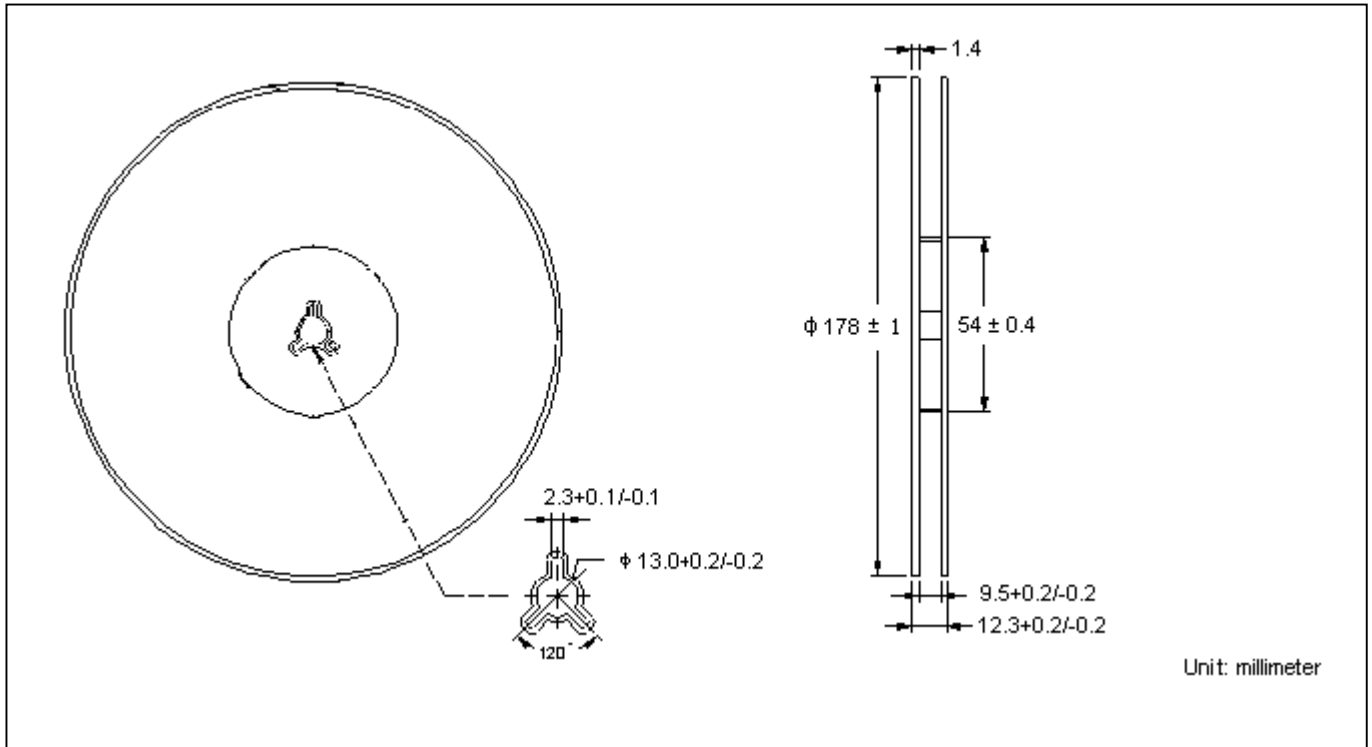
Cutoff Frequency vs Collector Current



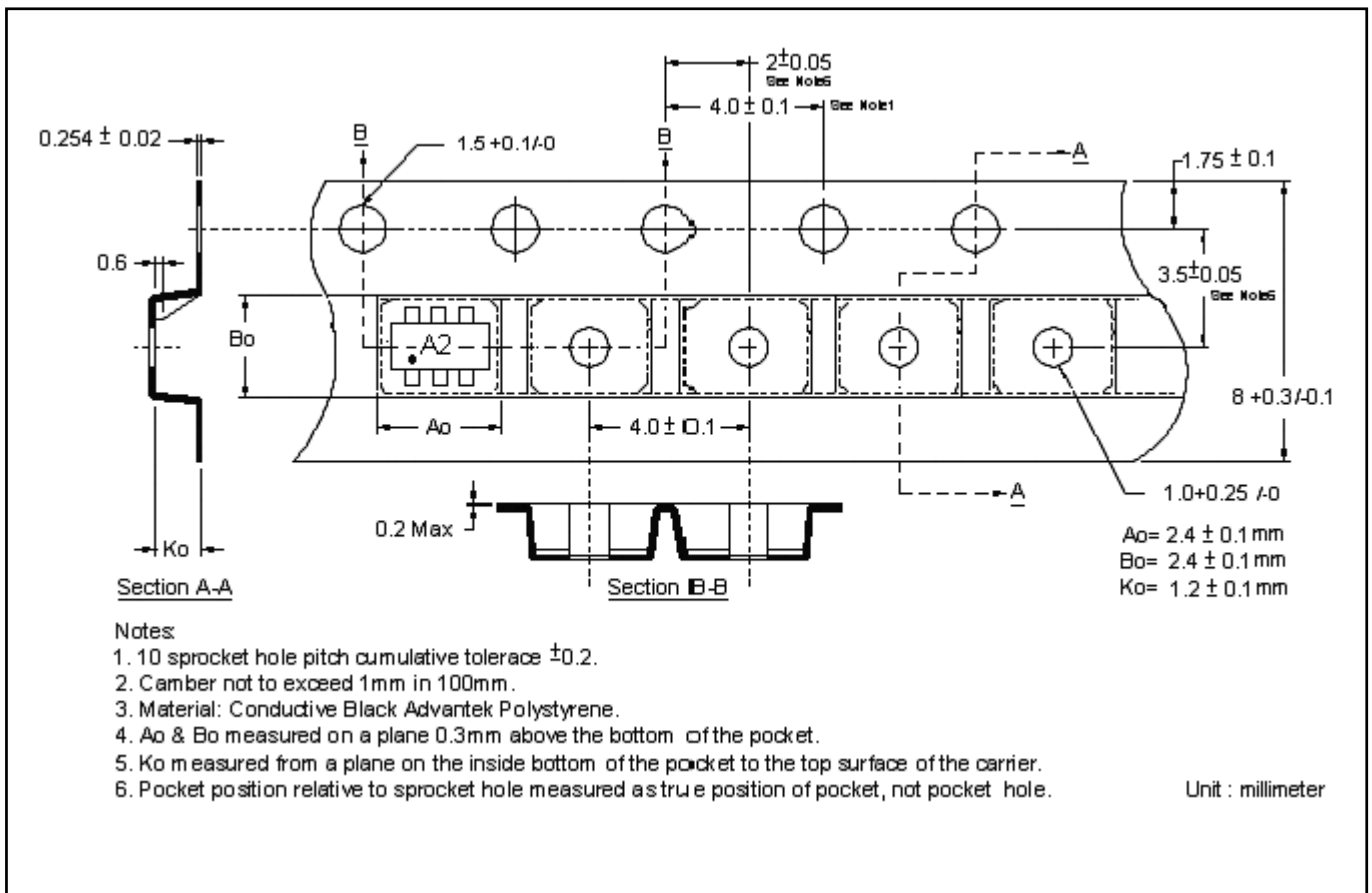
Power Derating Curves



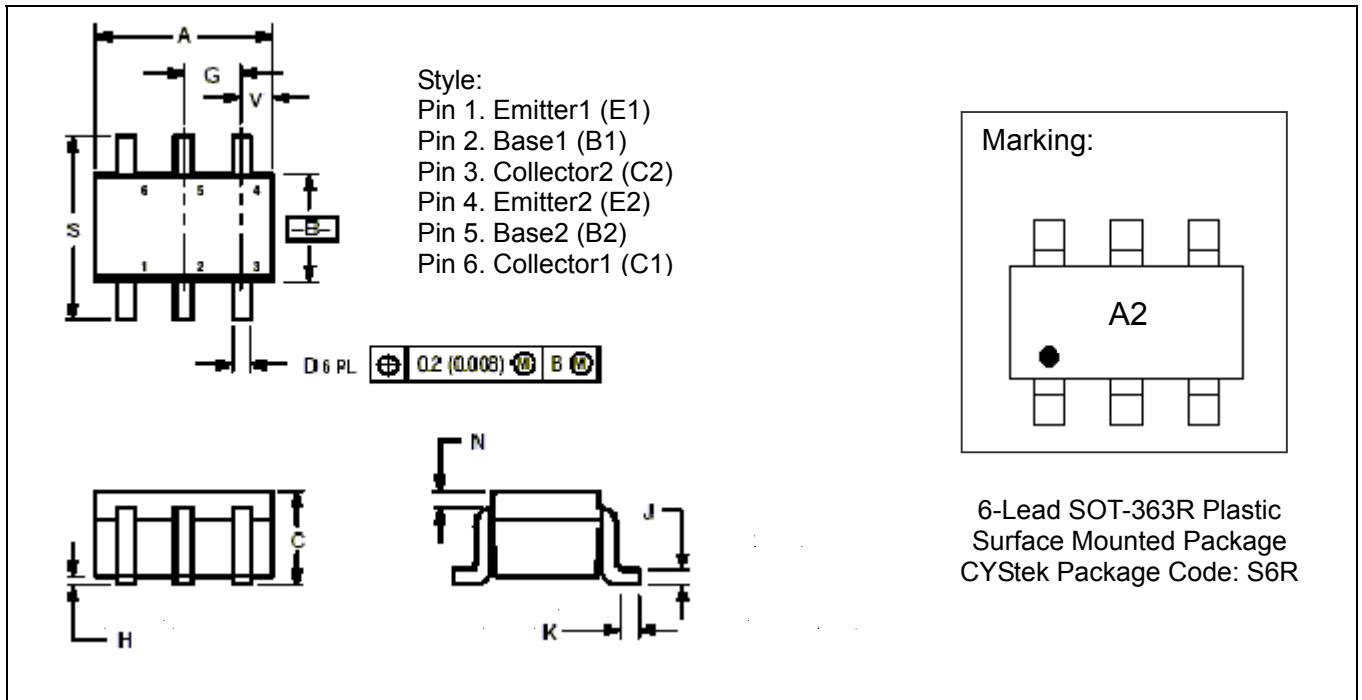
Reel Dimension



Carrier Tape Dimension



SOT-363R Dimension



*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.071	0.087	1.8	2.2	J	0.004	0.010	0.1	0.25
B	0.045	0.053	1.15	1.35	K	0.004	0.012	0.1	0.30
C	0.031	0.043	0.8	1.1	N	0.008 REF		0.20 REF	
D	0.004	0.012	0.1	0.3	S	0.079	0.087	2.00	2.40
G	0.026BSC		0.65BSC		Y	0.012	0.016	0.30	0.40
H	-	0.004	-	0.1					

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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