

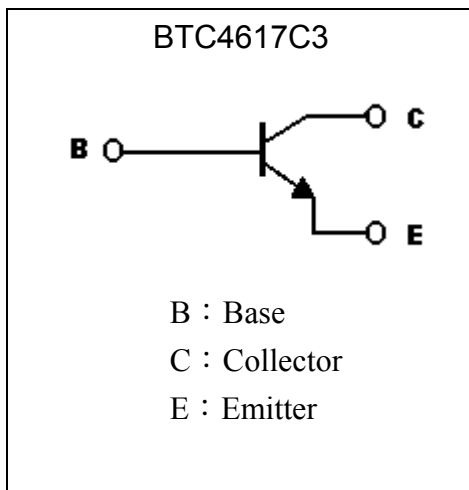
General Purpose NPN Epitaxial Planar Transistor

BTC4617C3

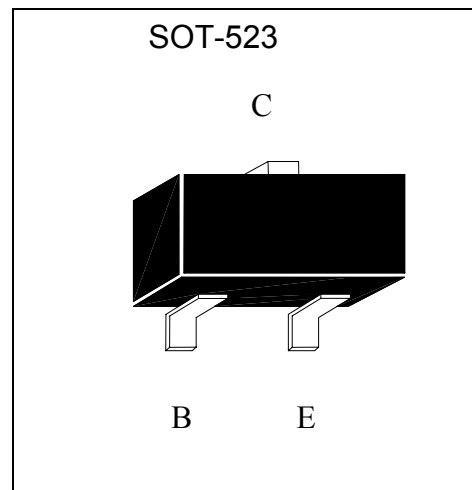
Description

The BTC4617C3 is designed for use in driver stage of AF amplifier and low speed switching.

Symbol



Outline



Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	V _{CBO}	60	V
Collector-Emitter Voltage	V _{CEO}	50	V
Emitter-Base Voltage	V _{EBO}	7	V
Collector Current	I _C	150	mA
Power Dissipation @Ta=25°C Derate above 25°C	P _d	150	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55~+150	°C

**Characteristics** (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV _{CBO}	60	-	-	V	I _C =50 μ A
BV _{CEO}	50	-	-	V	I _C =1mA
BV _{EBO}	7	-	-	V	I _E =50 μ A
I _{CBO}	-	-	100	nA	V _{CB} =60V
I _{EBO}	-	-	100	nA	V _{EB} =7V
*V _{CE(sat)}	-	-	0.5	V	I _C =50mA, I _B =5mA
h _{FE}	120	-	560	-	V _{CE} =6V, I _C =1mA
f _T	-	180	-	MHz	V _{CE} =12V, I _C =2mA, f=30MHz
Cob	-	2	3.5	pF	V _{CB} =12V, I _E =0A, f=1MHz

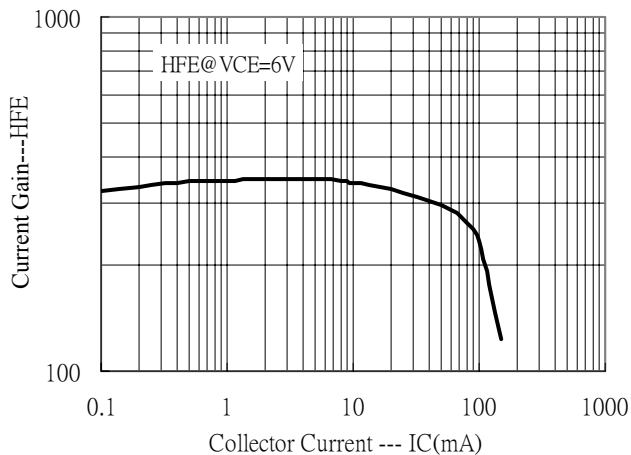
*Pulse Test: Pulse Width $\leq$ 380 μ s, Duty Cycle $\leq$ 2%**Marking Code and Classification of hFE**

Rank	Q	R	S
hFE Range	120-270	180-390	270-560
Marking	BQ	BR	BS

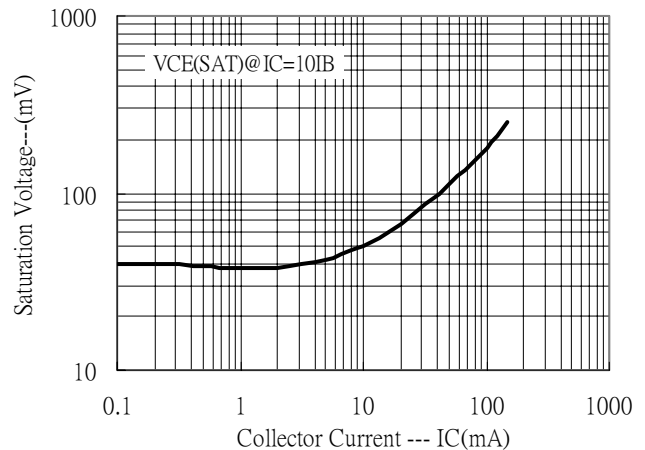


Characteristic Curves

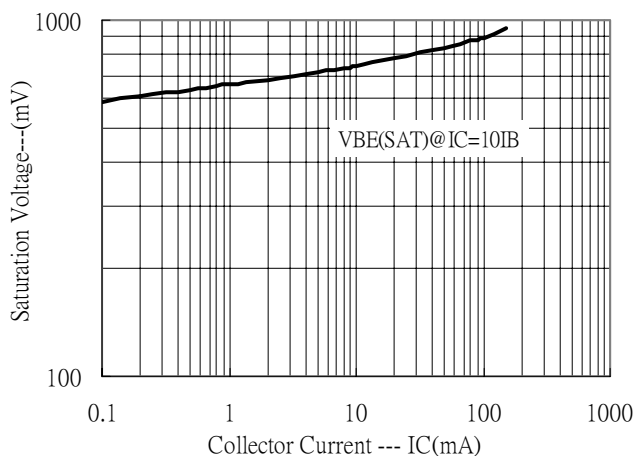
Current Gain vs Collector Current



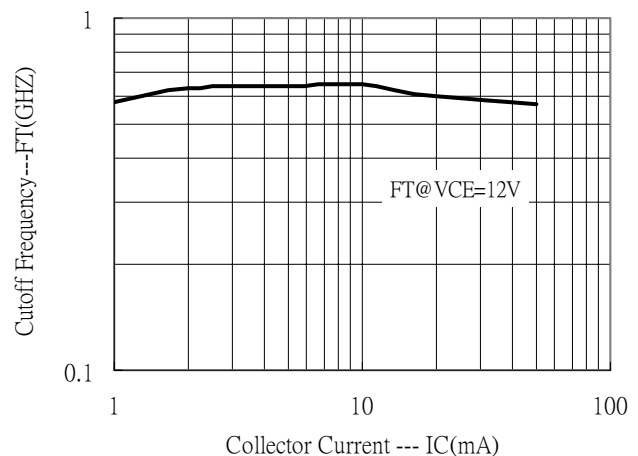
Saturation Voltage vs Collector Current



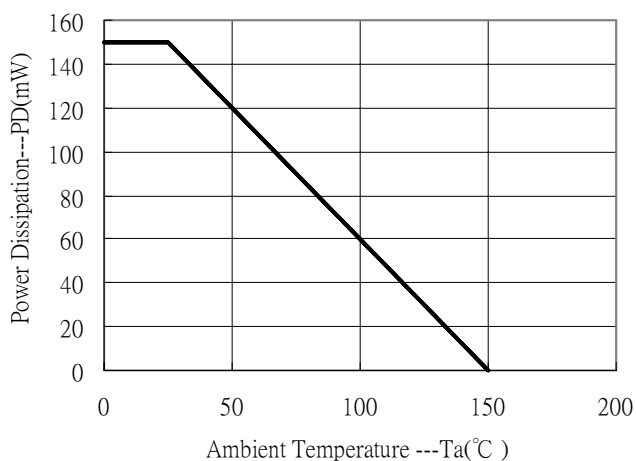
Saturation Voltage vs Collector Current



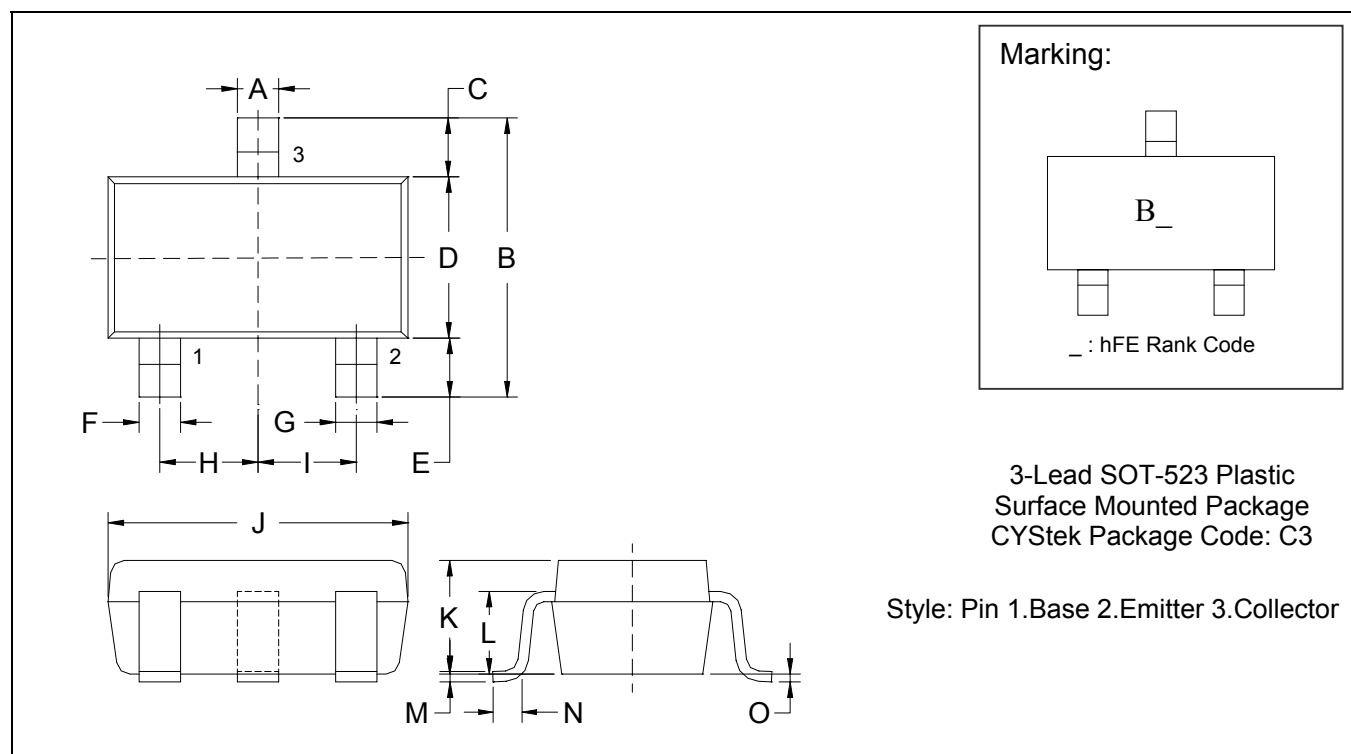
Cutoff Frequency vs Collector Current



Power Derating Curve



SOT-523 Dimension



*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.0079	0.0157	0.20	0.40	I	*0.0197	-	*0.50	-
B	0.0591	0.0669	1.50	1.70	J	0.0610	0.0650	1.55	1.65
C	0.0118	0.0197	0.30	0.50	K	0.0276	0.0315	0.70	0.80
D	0.0295	0.0335	0.75	0.85	L	0.0224	0.0248	0.57	0.63
E	0.0118	0.0197	0.30	0.50	M	0.0020	0.0059	0.05	0.15
F	0.0039	0.0118	0.10	0.30	N	0.0039	0.0118	0.10	0.30
G	0.0039	0.0118	0.10	0.30	O	0	0.0031	0	0.08
H	*0.0197	-	*0.50	-					

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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