

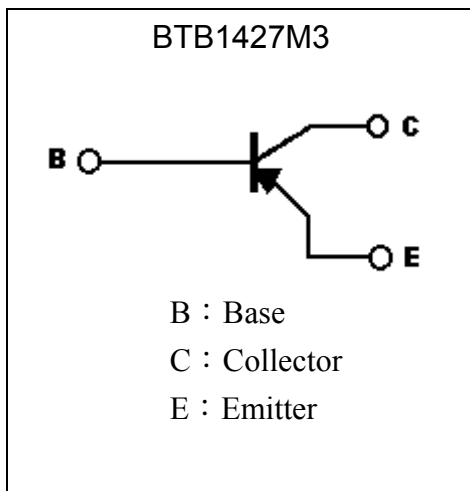
Low Vcesat PNP Epitaxial Planar Transistor

BTB1427M3

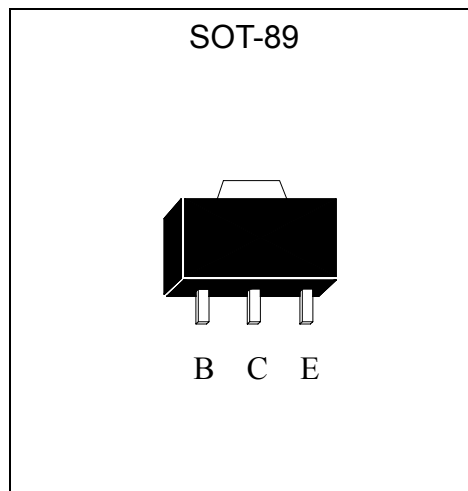
Features

- Low VCE(sat), VCE(sat)=-0.6 V (typical), at IC / IB = -4A / -0.1A
- Excellent DC current gain characteristics

Symbol



Outline



Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	V _{CB0}	-20	V
Collector-Emitter Voltage	V _{CEO}	-15	V
Emitter-Base Voltage	V _{EBO}	-6	V
Collector Current	I _C	-5	A
	I _{CP}	-10 (Note 1)	
Power Dissipation	P _d	0.5	W
	P _d	2 (Note 2)	
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55~+150	°C

Note : 1. Single Pulse Pw=10ms

2. When mounted on a 40 x40 x0.7 mm ceramic board.



Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV _{CBO}	-20	-	-	V	I _C =-50μA, I _E =0
BV _{CEO}	-15	-	-	V	I _C =-1mA, I _B =0
BV _{EBO}	-6	-	-	V	I _E =-50μA, I _C =0
I _{CBO}	-	-	-0.5	μA	V _{CB} =-20V, I _E =0
I _{EBO}	-	-	-0.5	μA	V _{EB} =-5V, I _C =0
*V _{CE(sat)}	-	-	-1.0	V	I _C =-4A, I _B =-0.1A
*h _{FE}	120	-	560	-	V _{CE} =-2V, I _C =-0.5A
f _T	-	120	-	MHz	V _{CE} =-6V, I _C =-50mA, f=30MHz
C _{ob}	-	60	-	pF	V _{CB} =-20V, f=1MHz

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

Classification Of hFE

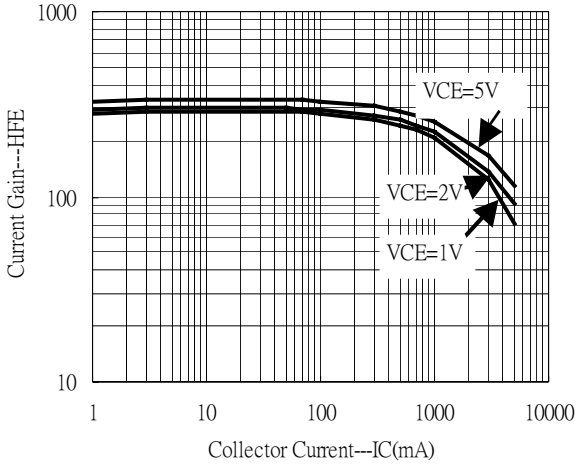
Rank	Q	R	S
Range	120~270	180~390	270~560

Ordering Information

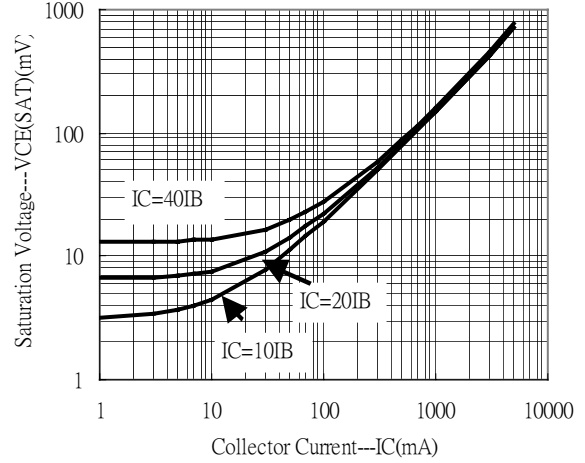
Device	Package	Shipping	Marking
BTB1386M3	SOT-89	1000 pcs / Tape & Reel	BH

Characteristic Curves

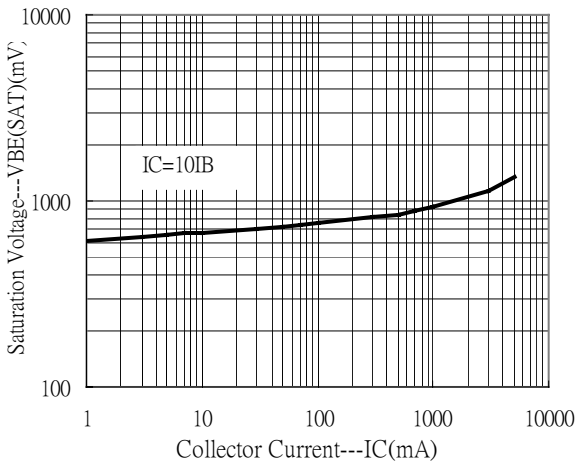
Current Gain vs Collector Current



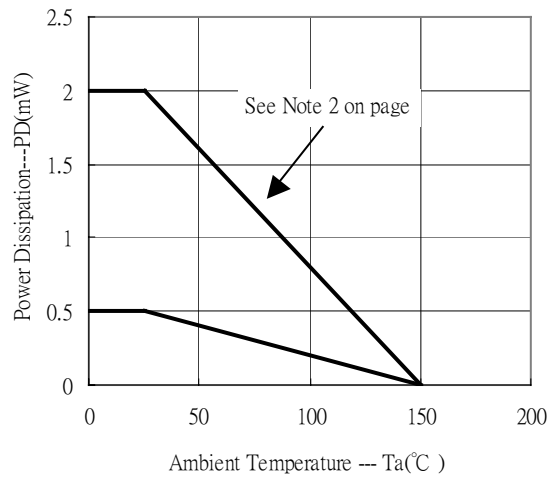
Saturation Voltage vs Collector Current



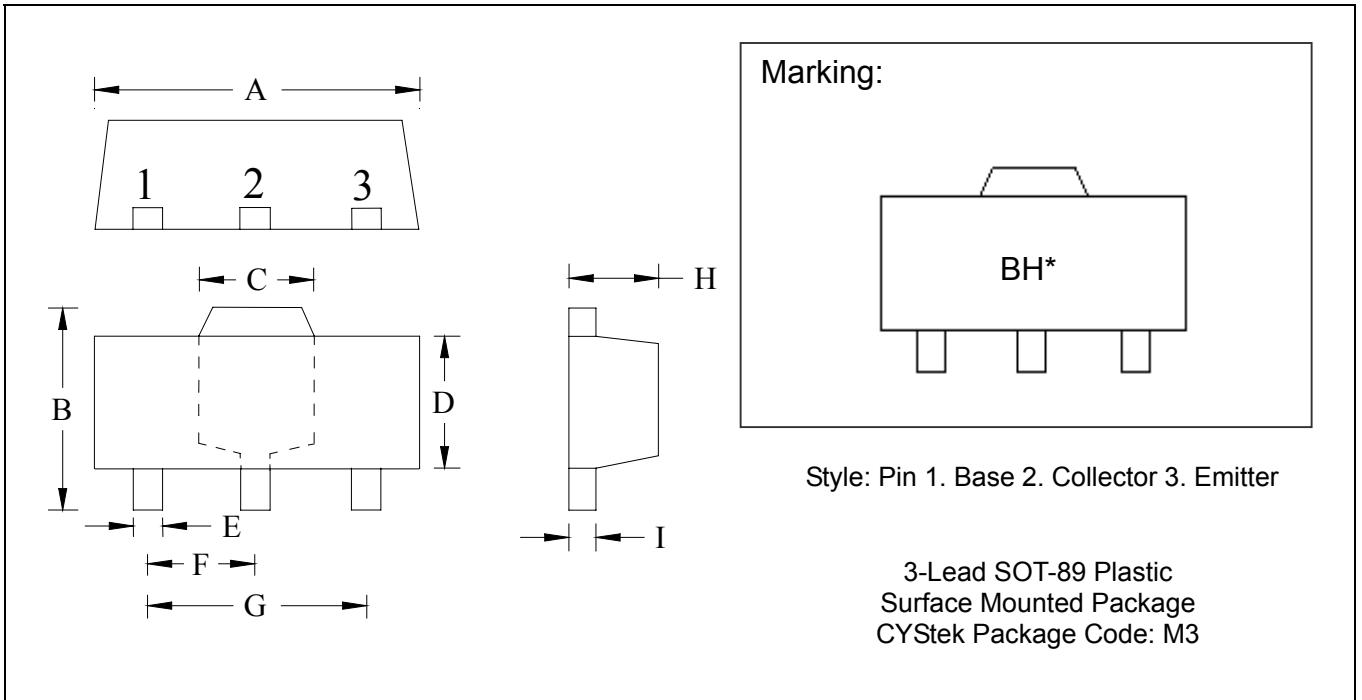
Saturation Voltage vs Collector Current



Power Derating Curve



SOT-89 Dimension



*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1732	0.1811	4.40	4.60	F	0.0583	0.0598	1.48	1.527
B	0.1594	0.1673	4.05	4.25	G	0.1165	0.1197	2.96	3.04
C	0.0591	0.0663	1.50	1.70	H	0.0551	0.0630	1.40	1.60
D	0.0945	0.1024	2.40	2.60	I	0.0138	0.0161	0.35	0.41
E	0.01417	0.0201	0.36	0.51					

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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