

**Descriptions**

- High current application
- Switching application

**Features**

- Suitable for AF-Driver stage and low power output stages
- Complementary pair with BC807F

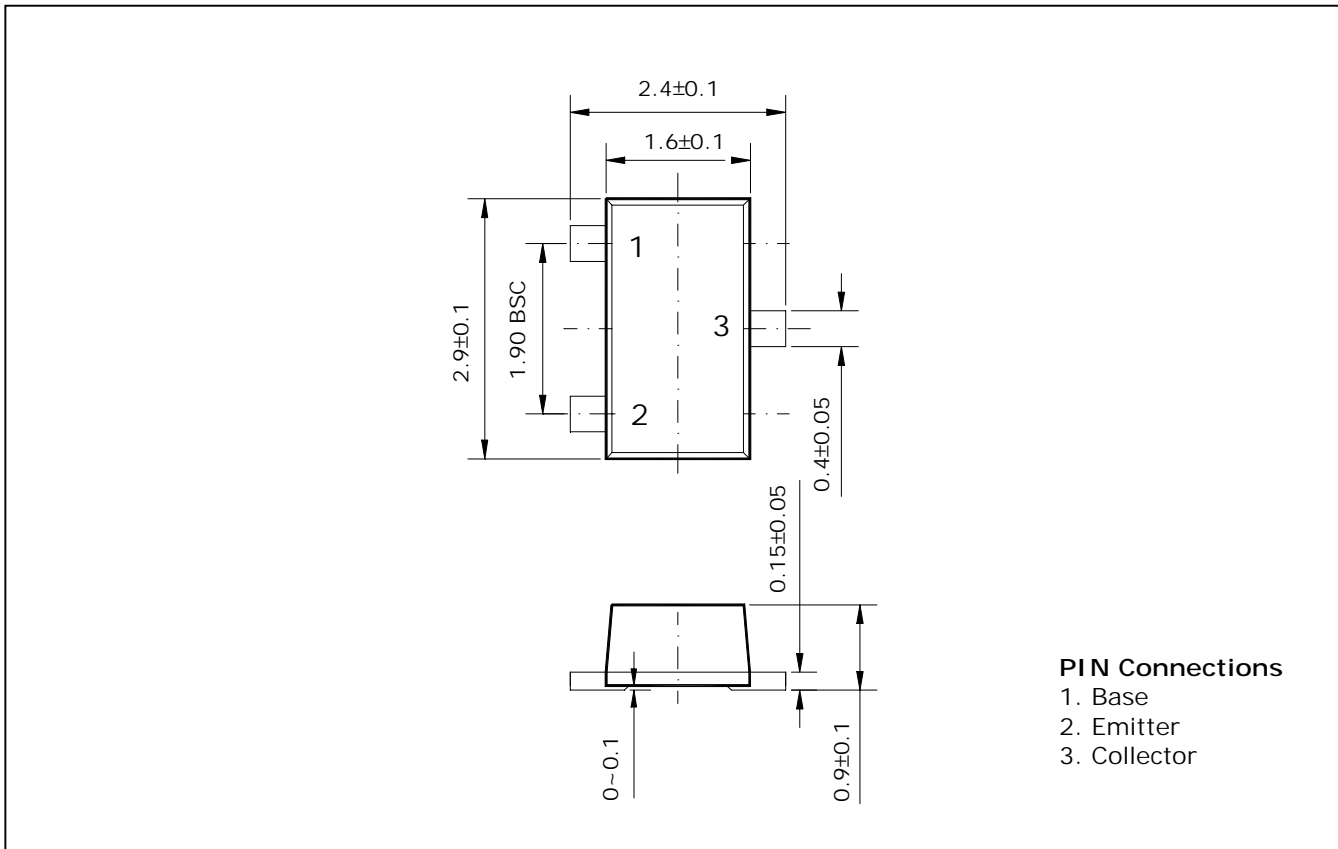
**Ordering Information**

Type NO.	Marking	Package Code
BC817F	NA□	SOT-23F

□ : h<sub>FE</sub> rank

**Outline Dimensions**

**unit : mm**



## Absolute maximum ratings

(Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	$V_{CBO}$	50	V
Collector-Emitter voltage	$V_{CEO}$	35	V
Emitter-Base voltage	$V_{EBO}$	5	V
Collector current	$I_C$	800	mA
Collector dissipation	$P_C$	200	mW
Junction temperature	$T_J$	150	°C
Storage temperature	$T_{stg}$	-55 ~ 150	°C

## Electrical Characteristics

(Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Emitter breakdown voltage	$BV_{CEO}$	$I_C=1\text{mA}, I_E=0$	35	-	-	V
Base-Emitter turn on voltage	$V_{BE(ON)}$	$V_{CE}=1\text{V}, I_C=300\text{mA}$	-	-	1.2	V
Collector-Emitter saturation voltage	$V_{CE(sat)}$	$I_C=500\text{mA}, I_B=50\text{mA}$	-	-	700	mV
Collector cut-off current	$I_{CBO}$	$V_{CB}=25\text{V}, I_E=0$	-	-	100	nA
DC current gain	$h_{FE}^*$	$V_{CE}=1\text{V}, I_C=100\text{mA}$	100	-	630	-
Transition frequency	$f_T$	$V_{CB}=5\text{V}, I_C=10\text{mA}$	-	100	-	MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$	-	16	-	pF

\* :  $h_{FE}$  rank / 16(A) : 100 ~ 250, 25(B) : 160 ~ 400, 40(C) : 250 ~ 630

Electrical Characteristic Curves

Fig. 1  $P_C - T_a$

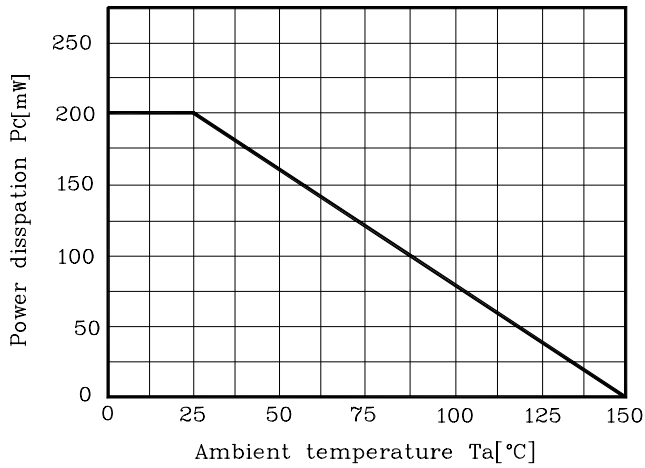


Fig. 2  $I_C - V_{BE}$

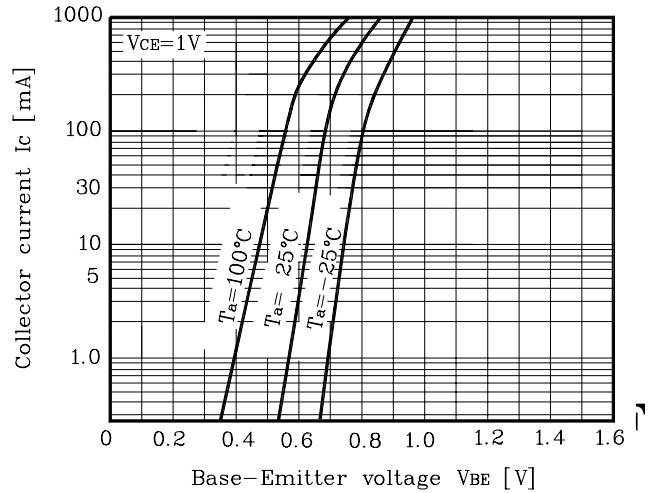


Fig. 3  $I_C - V_{CE}$

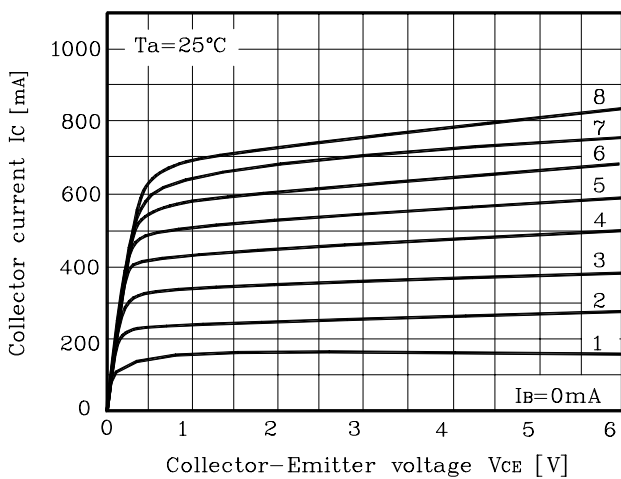


Fig. 4  $V_{CE(sat)} - I_C$

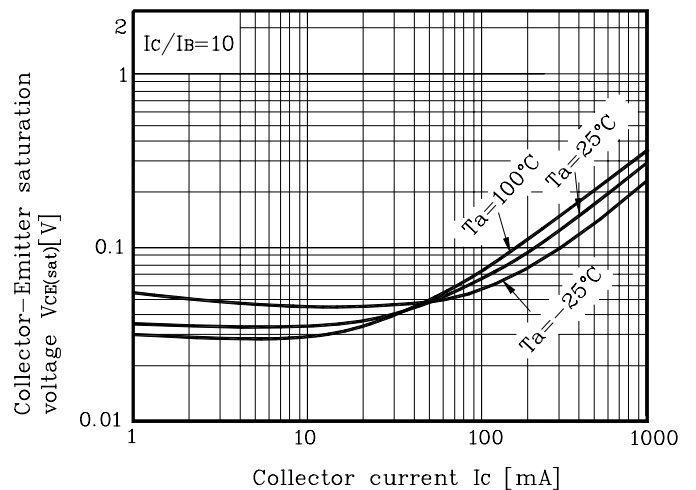


Fig. 5  $h_{FE} - I_C$

