

**Descriptions**

- High current application
- Switching application

**Features**

- Suitable for AF-Driver stage and low power output stages
- Complementary Pair with BC817F

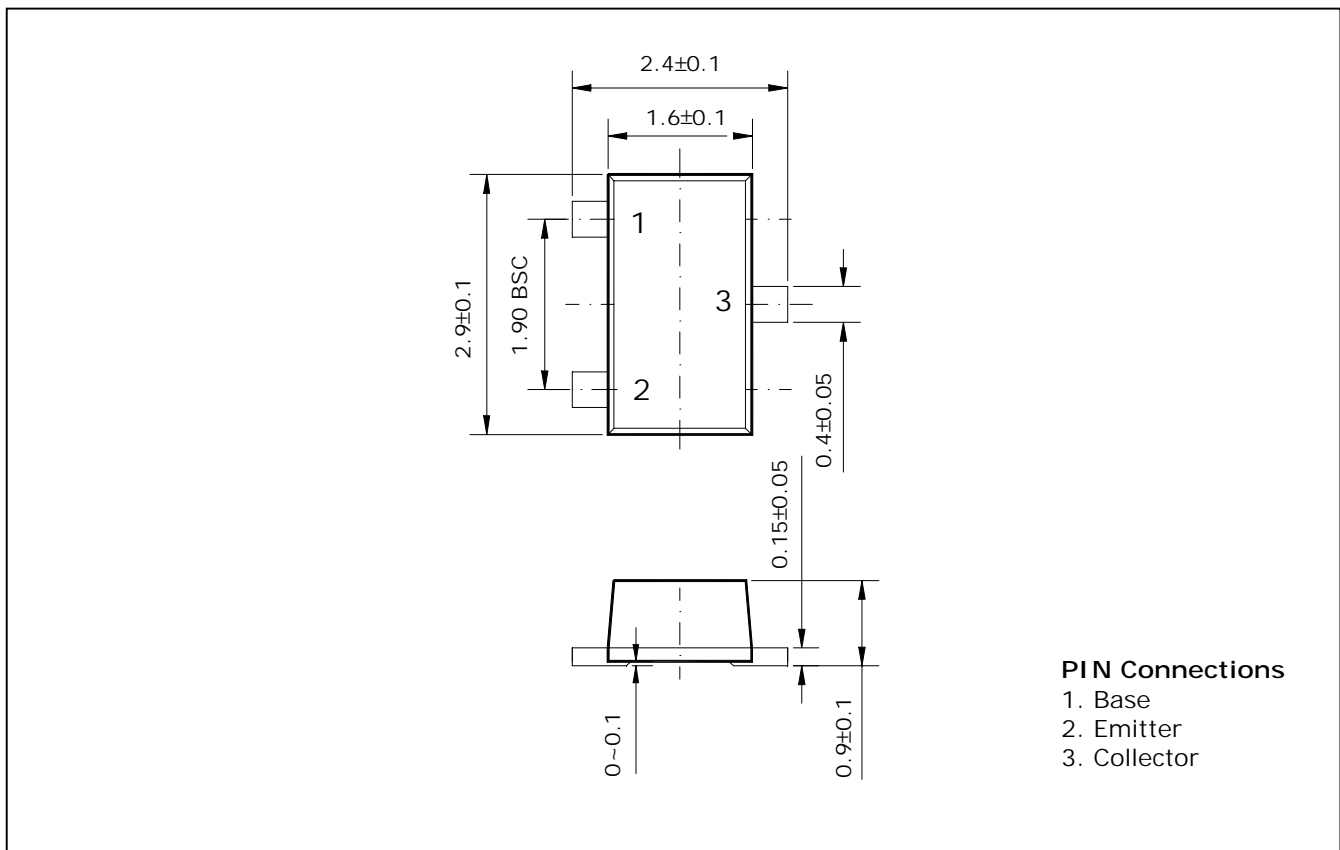
**Ordering Information**

Type NO.	Marking	Package Code0
BC807F	LA□	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	$BV_{CEO}$	$I_C = -1\text{mA}, I_B = 0$	-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	$f_T$	$V_{CB} = -5\text{V}, I_E = 10\text{mA}$ $f = 100\text{MHz}$	-	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  $P_C$ - $T_a$

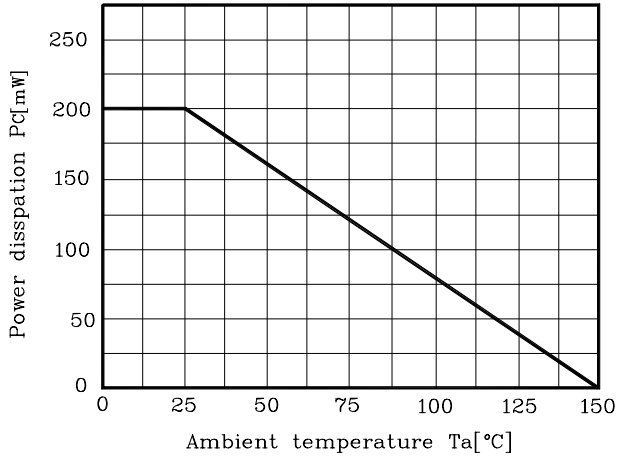


Fig. 2  $I_C$  -  $V_{BE}$

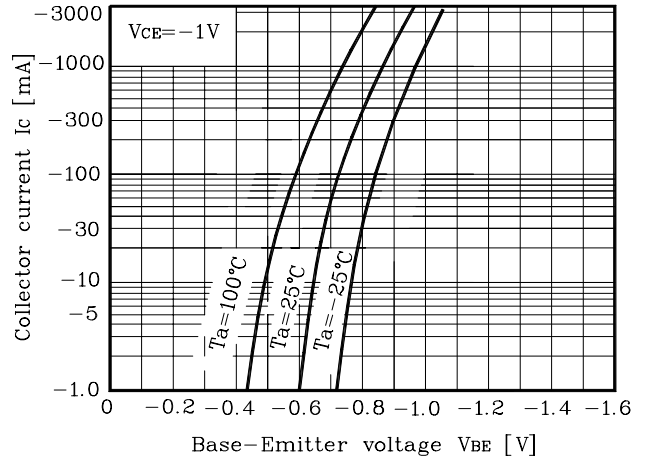


Fig. 3  $I_C$  -  $V_{CE}$

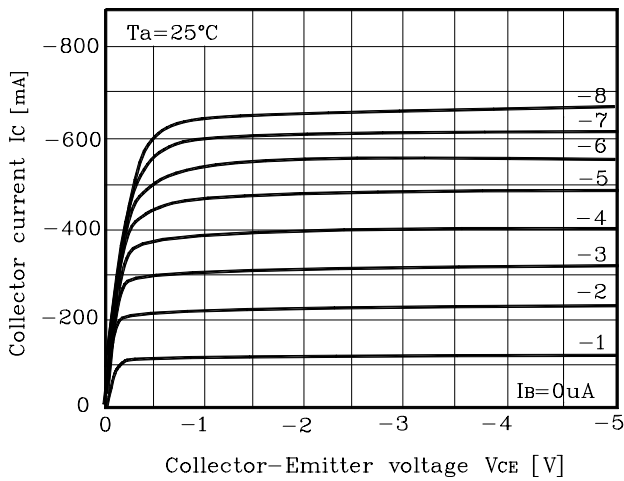


Fig. 4  $h_{FE}$  -  $I_C$

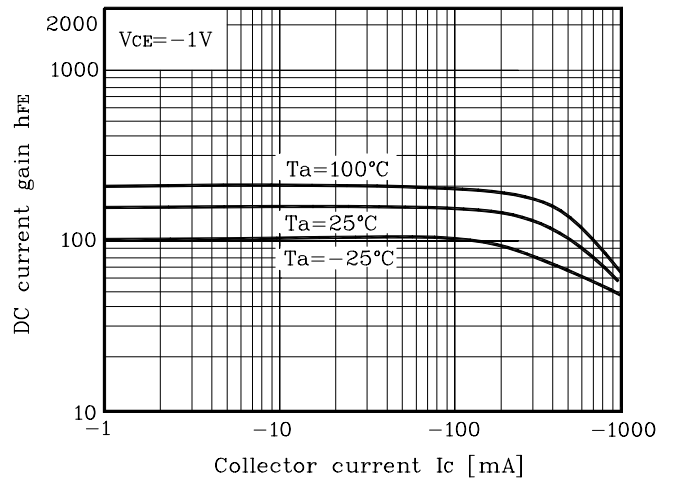
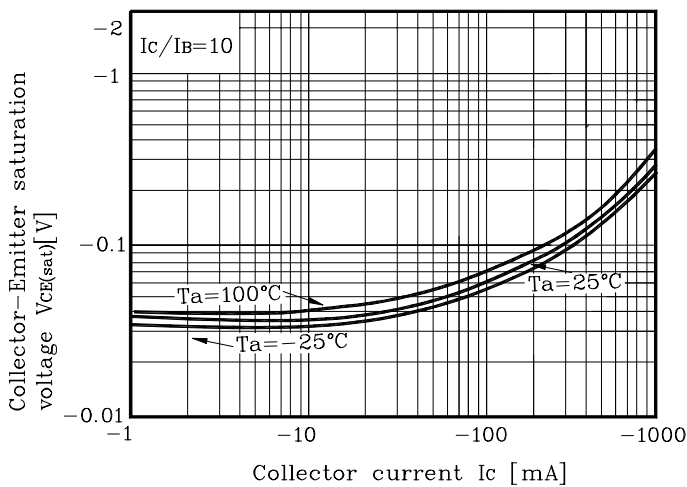


Fig. 5  $V_{CE(sat)}$  -  $I_C$





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