

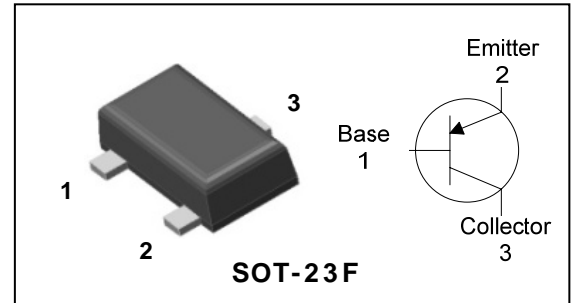
Descriptions

- High current application
- Switching application

Features

- Suitable for AF-Driver stage and low power output stages
- Complementary pair with BC818F

PIN Connection



Ordering Information

Type NO.	Marking	Package Code
BC808F	MA <input type="checkbox"/> <input type="checkbox"/> ① ② ③	SOT-23F

① Device Code ② hFE Rank ③ Year&Week Code

Absolute maximum ratings

(Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V_{CBO}	-30	V
Collector-Emitter voltage	V_{CEO}	-25	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}	$I_C = -1\text{mA}, I_B = 0$	-25	-	-	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 Pc-Ta

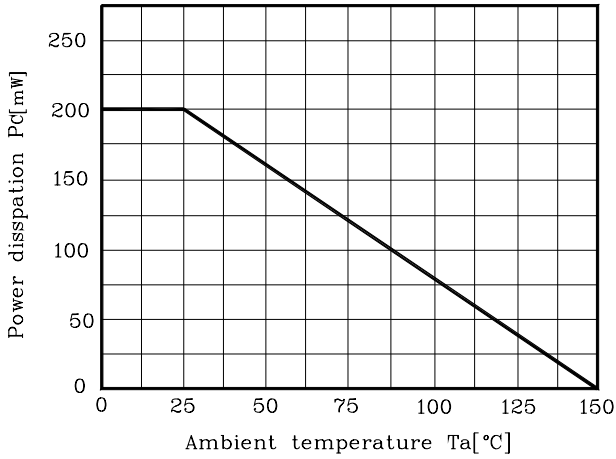


Fig. 2 IC - VBE

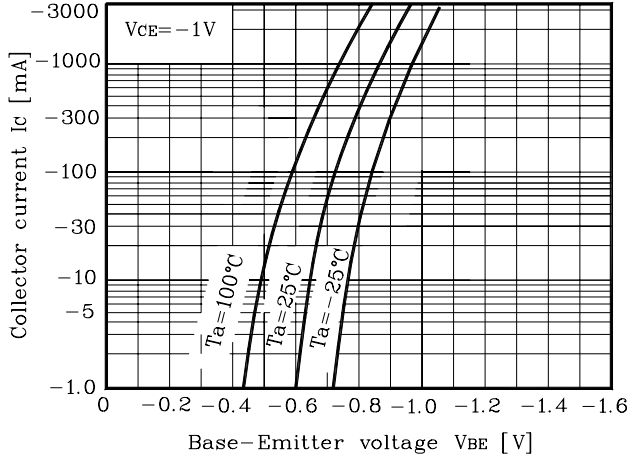


Fig. 3 IC - VCE

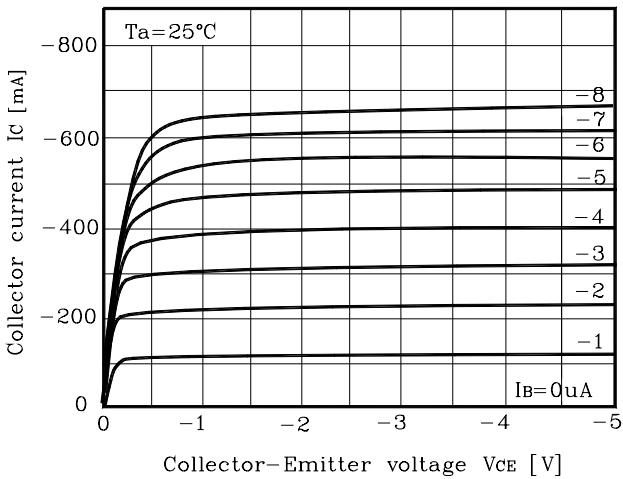


Fig. 4 hFE - IC

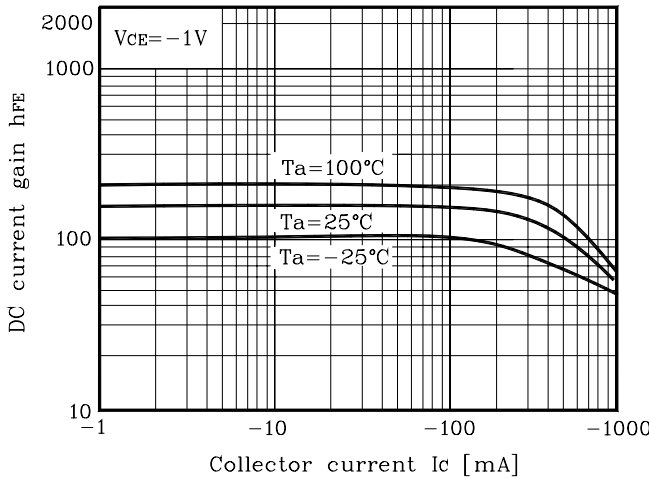
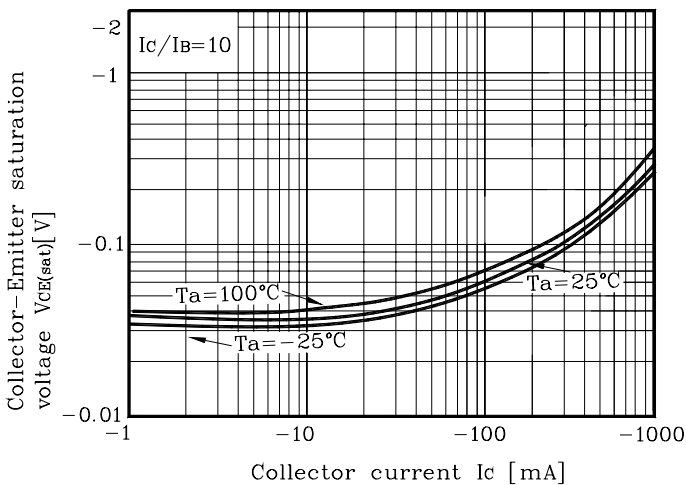
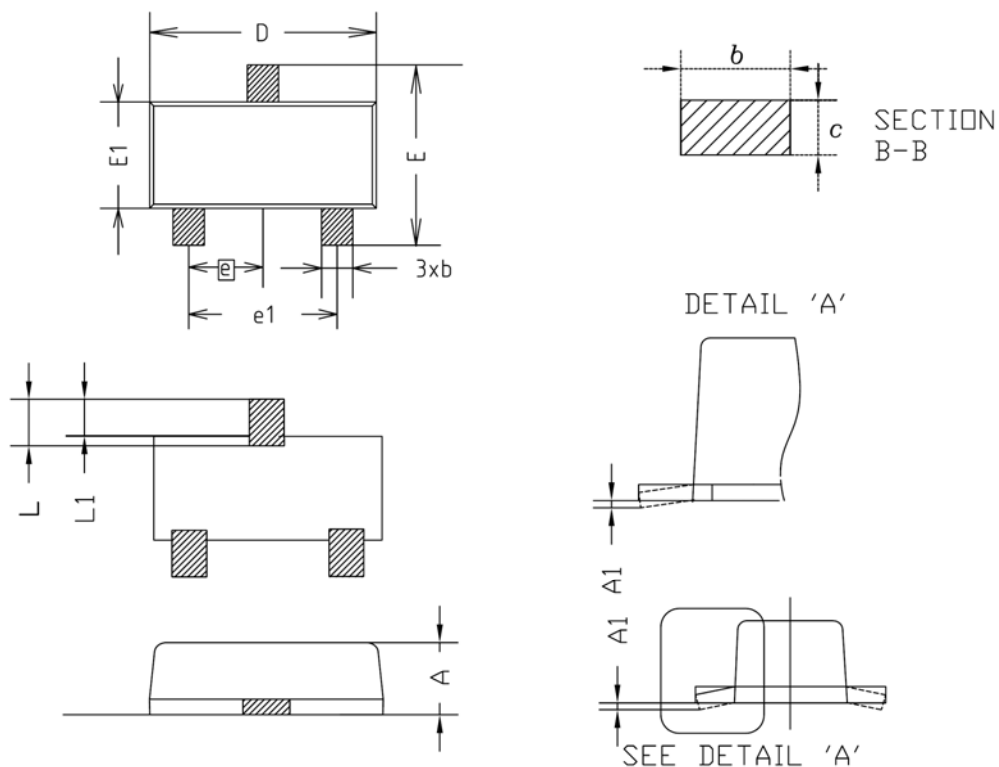


Fig. 5 VCE(sat) - IC

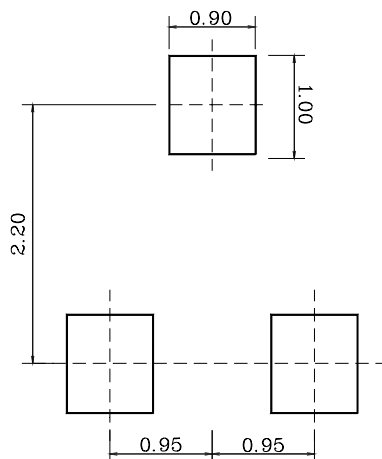


Outline Dimension



SYMBOL	MILLIMETER(mm)			NOTE
	MINIMUM	NOMINAL	MAXIMUM	
A	0.80	0.90	1.00	
A1	0.00	-	0.10	
b	0.35	0.40	0.45	
c	0.10	0.15	0.20	
D	2.80	2.90	3.00	
E	2.30	2.40	2.50	
E1	1.50	1.60	1.70	
e	0.95BSC			
e1	1.80	1.90	2.00	
L	0.48	0.58	0.68	
L1	0.30	-	0.50	

※Recommend PCB solder land [Unit: mm]



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