



NPN Silicon Transistor

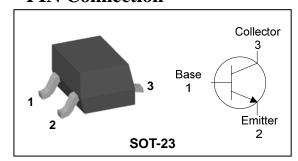
Descriptions

- High current application
- Switching application

Features

- Suitable for AF-Driver stage and low power output stages
- Complementary pair with BC807

PIN Connection



Ordering Information

Type NO.	Marking	Package Code	
BC817	<u>NA</u> □ □ 3	SOT-23	

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}	50	V
Collector-Emitter voltage	$V_{\sf CEO}$	35	V
Emitter-Base voltage	V_{EBO}	5	V
Collector current	I _C	800	mA
Collector dissipation	P _C	200	mW
Junction temperature	Tj	150	°C
Storage temperature	T_{stg}	-55~150	°C

Electrical Characteristics

(Ta=25°C)

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

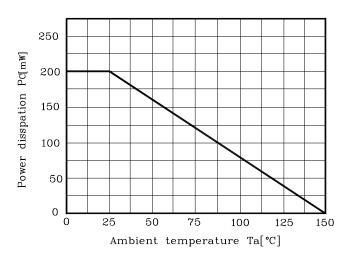


Fig. 3 $I_{\rm C}~$ - $V_{\rm CE}$

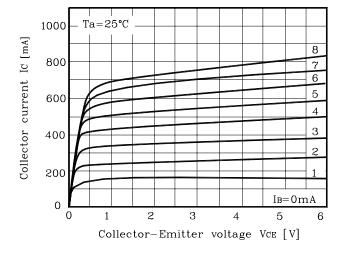


Fig. 5 h_{FE} - I_C

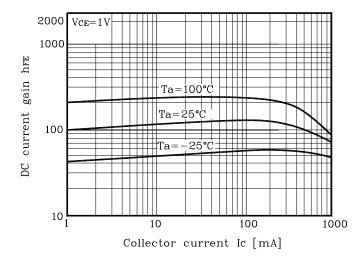


Fig. 2 I_C - V_{BE}

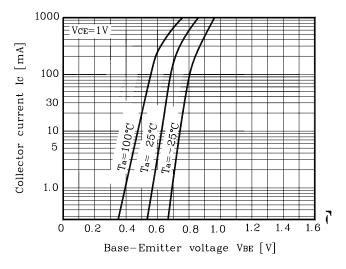
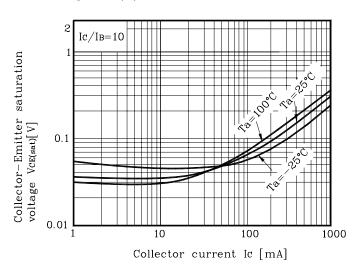
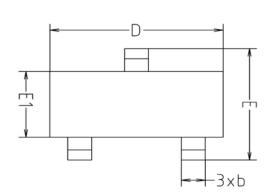
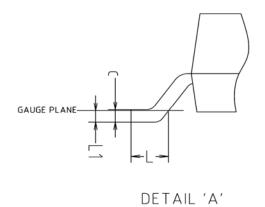


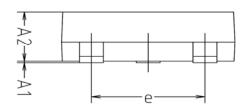
Fig. 4 $V_{CE(sat)}\,$ - $\,I_{C}\,$



Outline Dimension



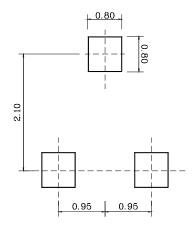






SYMBOL	MILLIMETERS			NOTE	
STIBOL	MINIMUM	NOMINAL	MAXIMUM	NOTE	
A1	0.00	-	0.10		
A2	0.82	-	1.02		
Ь	0.39	0.42	0.45		
С	0.09	0.12	0.15		
D	2.80	2.90	3.00		
Е	2.20	2.40	2.60		
E1	1.20	1.30	1.40		
е	1.90BSC				
L	0.20	-	-		
L1	0.12BSC				

***Recommend PCB solder land [Unit: mm]**



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