AUK Semiconductor

STB1188

PNP Silicon Transistor

Description

- Medium power amplifier

Features

- P_C(Collector dissipation)=2W (Ceramic substate of 40×40×0.8mm used)
- Low collector saturation voltage : $V_{CE(sat)}$=-0.5V(Typ.)
- Complementary pair with STD1766

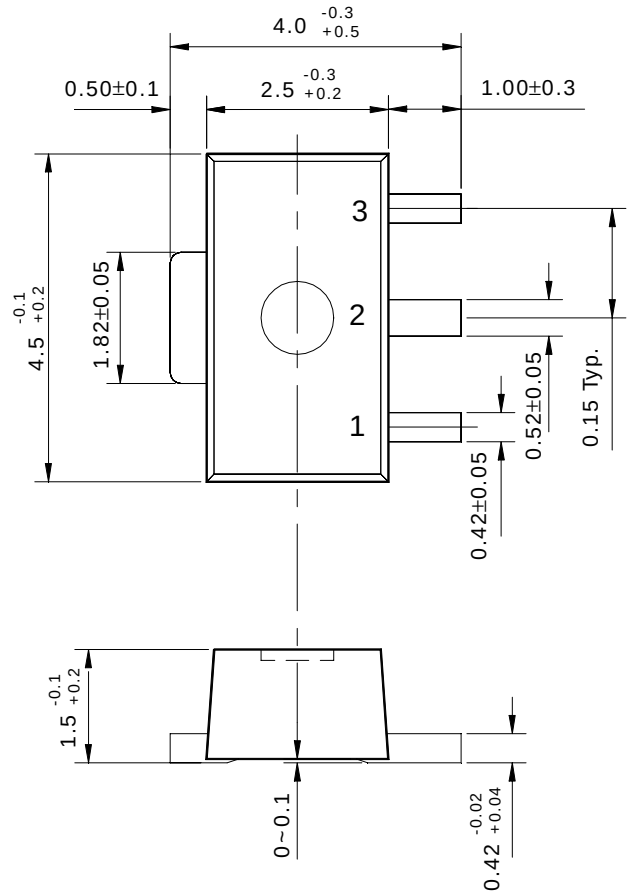
Ordering Information

Type NO.	Marking	Package Code
STB1188	B1□□	SOT-89

□□ : h_{FE} rank, monthly code

Outline Dimensions

unit : mm



PIN Connections
1. Base
2. Collector
3. Emitter

Absolute maximum ratings (Ta=25°C)

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V_{CBO}	-40	V
Collector-Emitter voltage	V_{CEO}	-32	V
Emitter-Base voltage	V_{EBO}	-5	V
Collector current	I_C	-2	A
Collector dissipation	P_C	0.5	W
	P_C^*	2	
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55~150	°C

* : When mounted on 40×40×0.8mm ceramic substate

Electrical Characteristics (Ta=25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base breakdown voltage	BV_{CBO}	I_C=-50μA, I_E=0	-40	-	-	V
Collector-Emitter breakdown voltage	BV_{CEO}	I_C=-1mA, I_B=0	-32	-	-	V
Emitter-Base breakdown voltage	BV_{EBO}	I_E=-50μA, I_C=0	-5	-	-	V
Collector cut-off current	I_{CBO}	V_{CB}=-20V, I_E=0	-	-	-1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-4V, I_C=0	-	-	-1	μA
DC current gain	h_{FE}^*	V_{CE}=-3V, I_C=-0.1A	100	-	320	-
Collector-Emitter on voltage	$V_{CE(sat)}$	I_C=-2A, I_B=-200mA	-	-0.5	-0.8	V
Transition frequency	f_T	V_{CB}=-5V, I_C=-500mA, f=30MHz	-	150	-	MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	50	-	pF

* : h_{FE} rank / O : 100~200, Y : 160~320

Electrical Characteristic Curves

Fig. 1 P_C - T_a

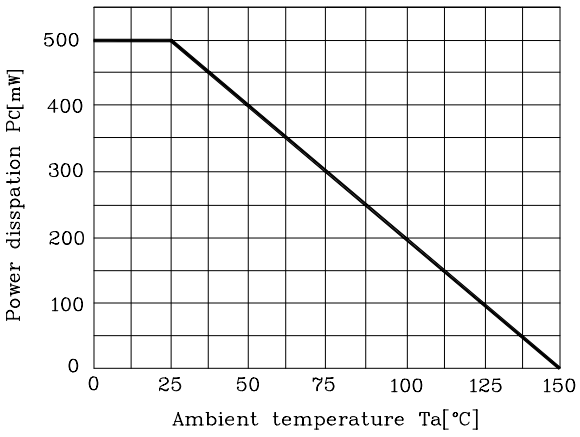


Fig. 2 I_C - V_{BE}

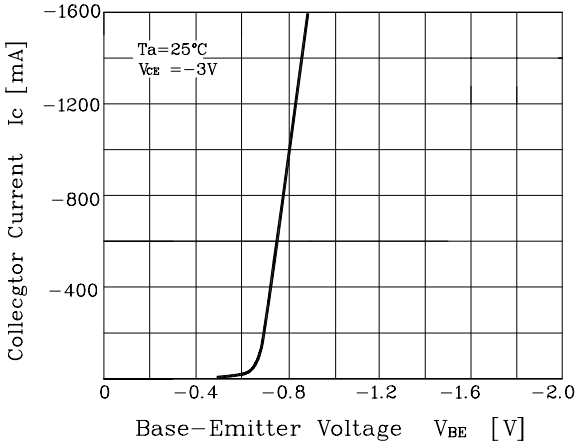


Fig. 3 I_C - V_{CE}

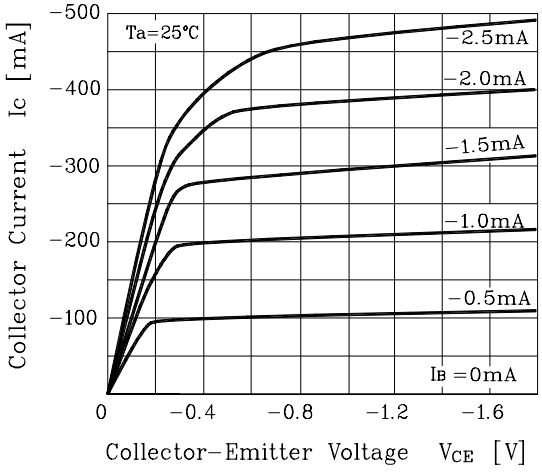


Fig. 4 $V_{CE(sat)}$ - I_C

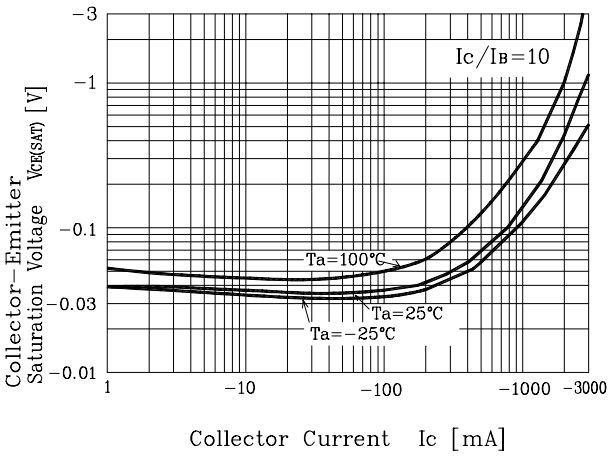


Fig. 5 h_{FE} - I_C