

**Description**

- Medium power amplifier

**Features**

- $P_C$ (Collector dissipation) = 2W(Ceramic substate of 40×40×0.8mm used)
- Low collector saturation voltage :  $V_{CE(sat)} = -0.2V$ (Typ.)
- Complementary pair with STD1664

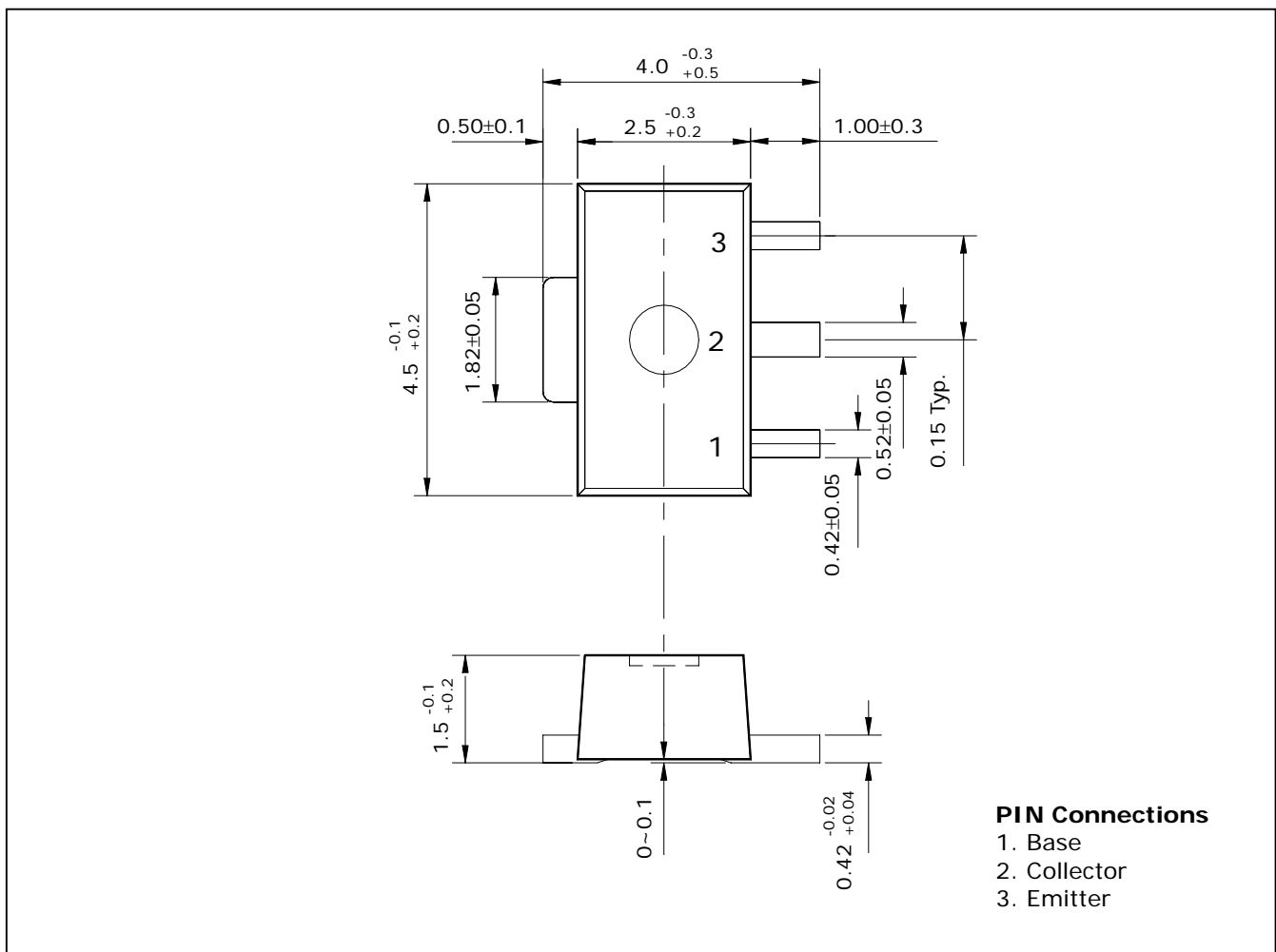
**Ordering Information**

Type NO.	Marking	Package Code
STB1132	A1□□	SOT-89

□□ :  $h_{FE}$  rank, monthly code

**Outline Dimensions**

**unit : mm**



**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	$I_C$	-1	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	$BV_{CBO}$	$I_C = -50\mu A, I_E = 0$	-40	-	-	V
Collector-Emitter breakdown voltage	$BV_{CEO}$	$I_C = -1mA, I_B = 0$	-32	-	-	V
Emitter-Base breakdown voltage	$BV_{EBO}$	$I_E = -50\mu A, I_C = 0$	-5	-	-	V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -20V, I_E = 0$	-	-	-0.1	$\mu A$
Collector cut-off current	$I_{CES}$	$V_{CE} = -30V, I_C = 0$	-	-	-0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -4V, I_C = 0$	-	-	-0.1	$\mu A$
DC current gain	$h_{FE}^*$	$V_{CE} = -3V, I_C = -0.1A$	100	-	320	-
Collector-Emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$	-	-0.2	-0.8	V
Transition frequency	$f_T$	$V_{CE} = -5V, I_C = -50mA,$ $f = 30MHz$	-	150	-	MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$	-	20	30	pF

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

Electrical Characteristic Curves

Fig. 1  $P_C - T_a$

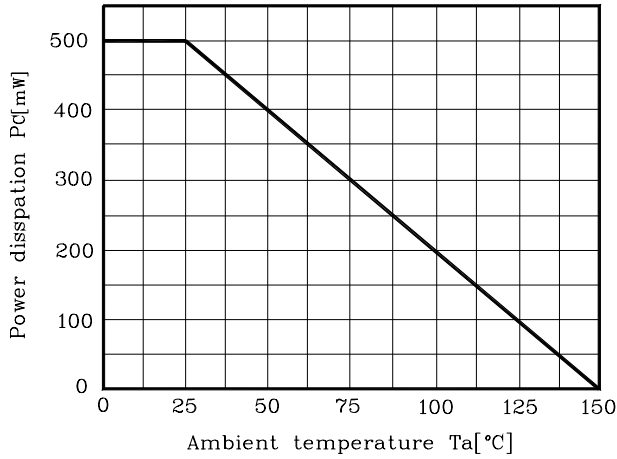


Fig. 2  $I_C - V_{BE}$

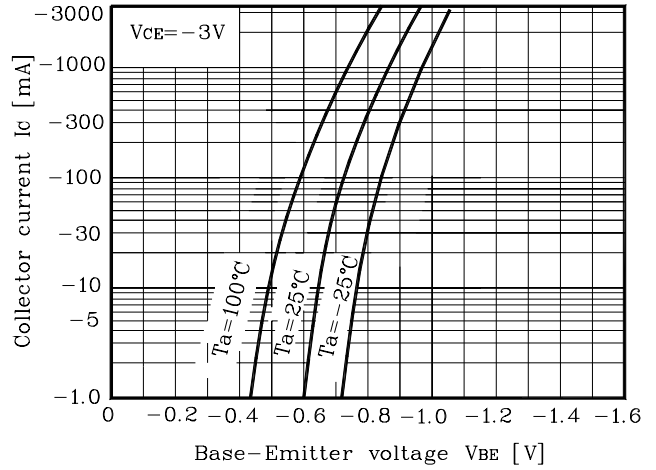


Fig. 3  $I_C - V_{CE}$

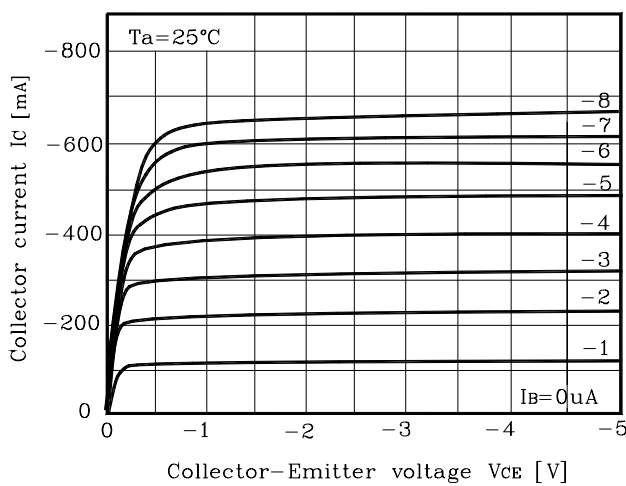


Fig. 4  $V_{CE(sat)} - I_C$

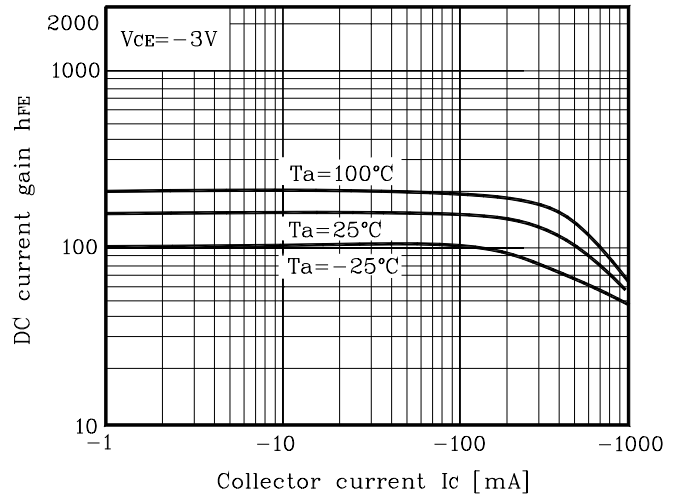
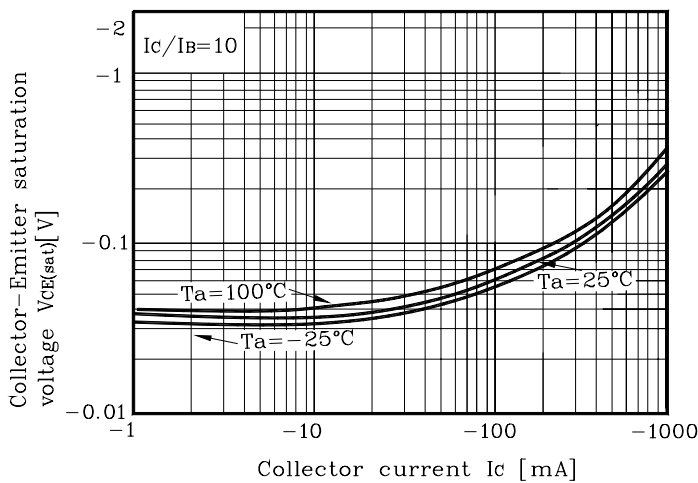


Fig. 5  $h_{FE} - I_C$



[www.s-manuals.com](http://www.s-manuals.com)