

1. Descriptions

- Audio power amplifier application

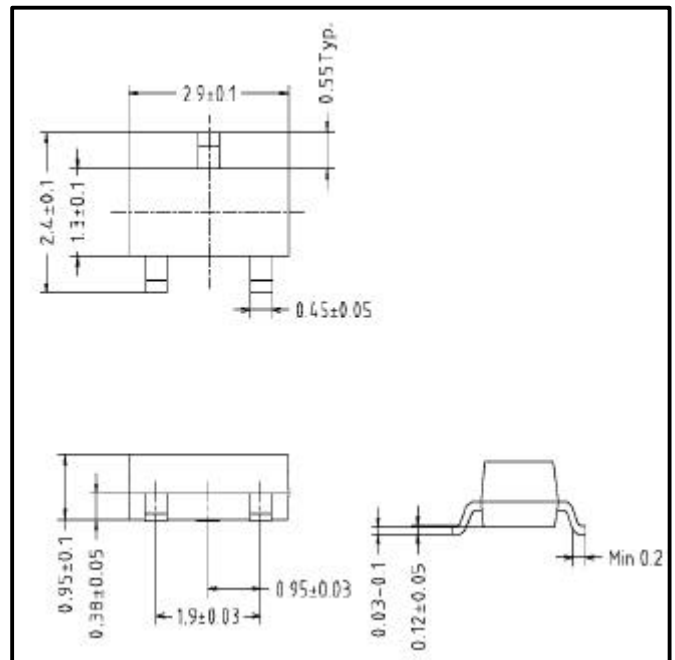
2. Features

- High h_{FE} ($h_{FE}=100\sim320$)
- Complementary to the SSC1781

3. Ordering Information

Device	Marking	Package
SSA1197	EA	SOT-23

: h_{FE} Rank



SOT-23 Package Outline Dimension

4. Maximum ratings ($T_a=25^\circ\text{C}$)

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V_{CBO}	-35	V
Collector-Emitter voltage	V_{CEO}	-30	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	$^\circ\text{C}$
Storage temperature	T_{stg}	-55~150	$^\circ\text{C}$

5. Electrical Characteristics ($T_a=25^\circ\text{C}$)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base breakdown voltage	BV_{CBO}	$I_C=-500\mu\text{A}$, $I_E=0$	-35	-	-	V
Collector-Emitter breakdown voltage	BV_{CEO}	$I_C=-1\text{mA}$, $I_B=0$	-30	-	-	V
Emitter-Base breakdown voltage	BV_{EBO}	$I_E=-50\mu\text{A}$, $I_C=0$	-5	-	-	V
Collector cut-off current	I_{CBO}	$V_{CB}=-35\text{V}$, $I_E=0$	-	-	-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5\text{V}$, $I_C=0$	-	-	-0.1	μA
DC current gain	h_{FE}^*	$V_{CE}=-1\text{V}$, $I_C=-100\text{mA}$	100	-	320	-
Collector-Emitter saturation voltage	$V_{CE(sat)}$	$I_C=-500\text{mA}$, $I_B=-20\text{mA}$	-	-	-0.5	V
Transition frequency	f_T	$V_{CE}=-5\text{V}$, $I_E=10\text{mA}$	-	120	-	MHz
Collector output capacitance	C_{ob}	$V_{CB}=-10\text{V}$, $I_E=0$, $f=1\text{MHz}$	-	19	-	pF

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

6. Electrical Characteristics Curves

Fig 1. $P_c - T_a$

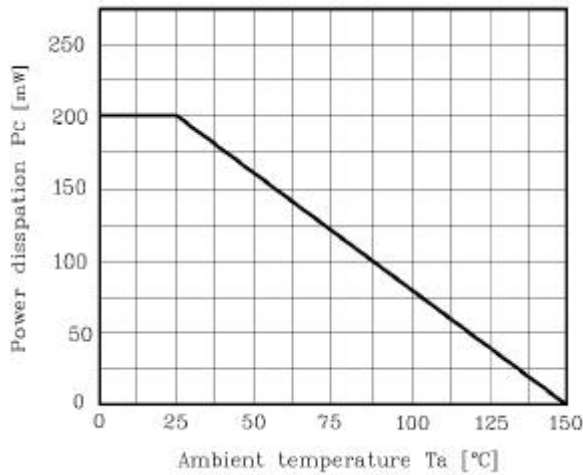


Fig 2. $I_C - V_{BE}$

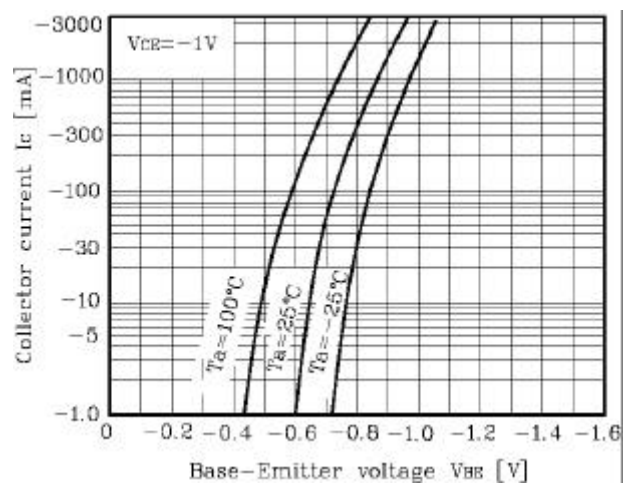


Fig 3. $I_C - V_{CE}$

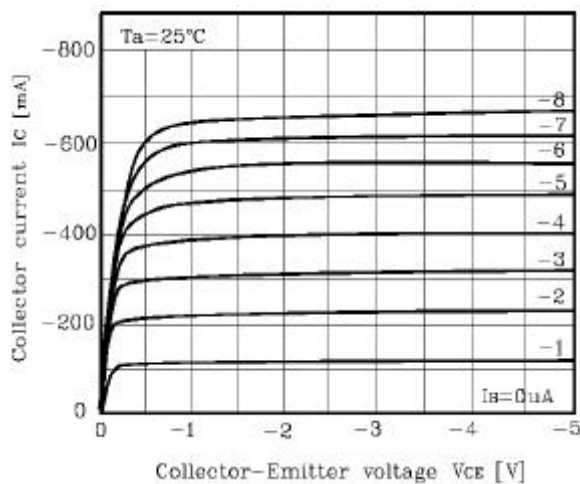


Fig 5. $V_{CE(sat)} - I_C$

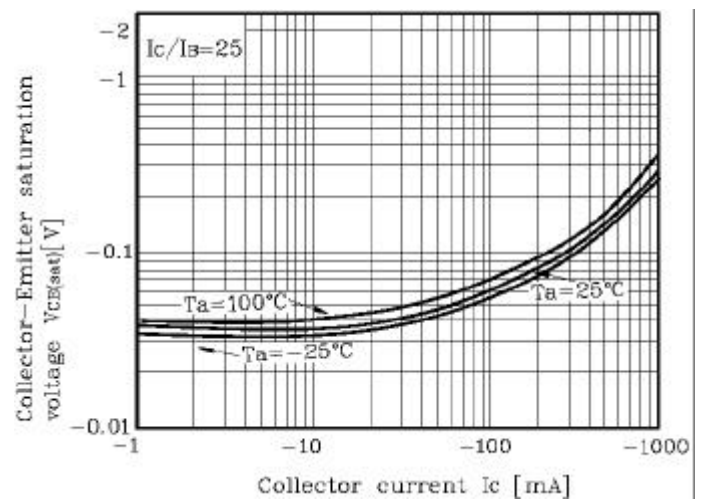


Fig 5. $h_{FE} - I_C$

