TECHNICAL DATA

SSC2412

NPN Silicon Transistor

1. Descriptions

·General small signal amplifier

2. Features

· Low collector saturation voltage

$V_{CE(sat)}$ = Max. 0.4V

· Low output capacitance

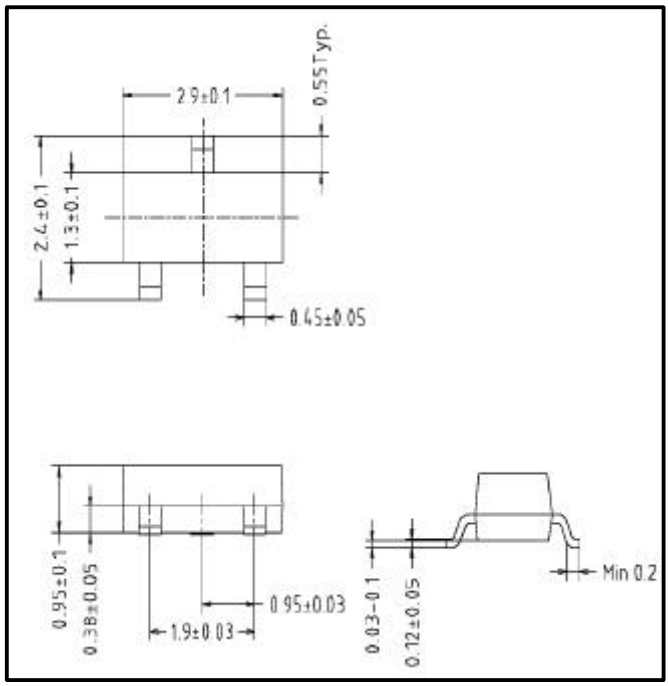
Cob= Typ. 2pF

· Complementary to the SSA1037

3. Ordering Information

Device	Marking	Package
SSC2412	DA□	SOT-23

□ : h_{FE} Rank



SOT-23 Package Outline Dimension

4. Maximum ratings (Ta=25℃)

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V_{CBO}	50	V
Collector-Emitter voltage	V_{CEO}	50	V
Emitter-Base voltage	V_{EBO}	5	V
Collector current	I_C	150	mA
Collector dissipation	P_C	200	mW
Junction temperature	T_J	150	°C
Storage temperature	T_{stg}	-55~150	°C

5. Electrical Characteristics (Ta=25℃)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Collector-Base breakdown voltage	BV_{CBO}	I_C=50uA, I_E=0	50	-	-	V
Collector-Emitter breakdown voltage	BV_{CEO}	I_C=1mA, I_B=0	50	-	-	V
Emitter-Base breakdown voltage	BV_{EBO}	I_E=50μA, I_C=0	5	-	-	V
Collector cut-off current	I_{CBO}	V_{CB}=30V, I_E=0	-	-	0.5	μA
Emitter cut-off current	I_{EBO}	V_{EB}=4V, I_C=0	-	-	0.5	μA
DC current gain	h_{FE}*	V_{CE}=6V, I_C=1mA	70	-	700	-
Collector-Emitter saturation voltage	$V_{CE(sat)}$	I_C=50mA, I_B=5mA	-	-	0.4	V
Transistion frequency	f_T	V_{CE}=12V, I_C=2mA	-	180	-	MHz
Collector output capacitance	C_{ob}	V_{CB}=12V, I_E=0, f=1MHz	-	2	-	pF
Noise figure	NF	V_{CE}=6V, I_C=0.1mA, f=1KHz, Rg=10KΩ	-	1	10	dB

h_{FE} Rank : O = 70~140 , Y=120~240 , G=200~400 , L=300~700

6. Electrical Characteristics Curves

Fig 1. Pc - Ta

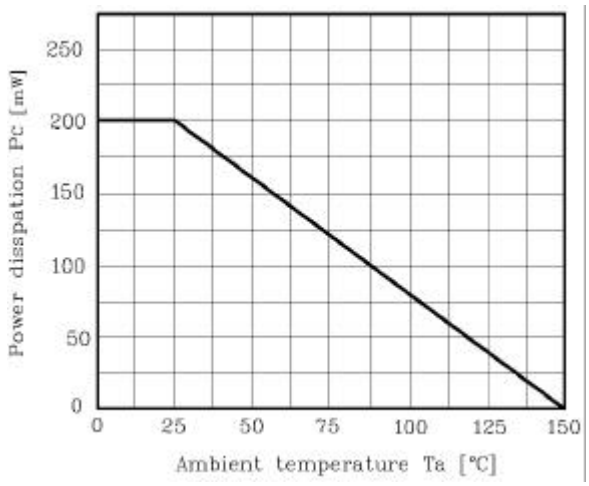


Fig 2. Ic - V_{BE}

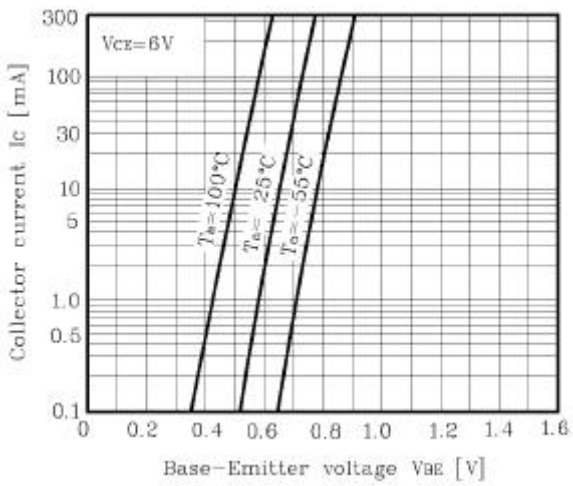


Fig 3. Ic – V_{CE}

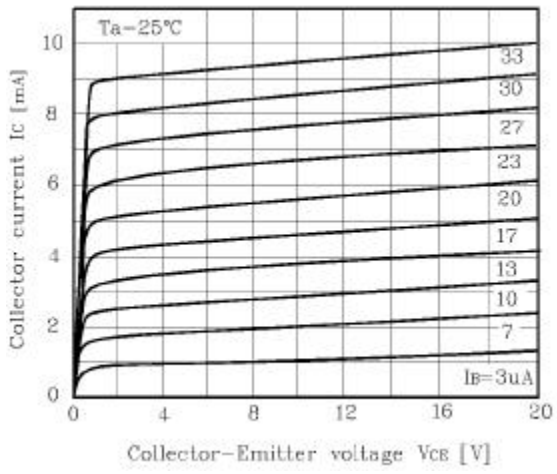


Fig 4. $V_{CE(sat)}$ - Ic

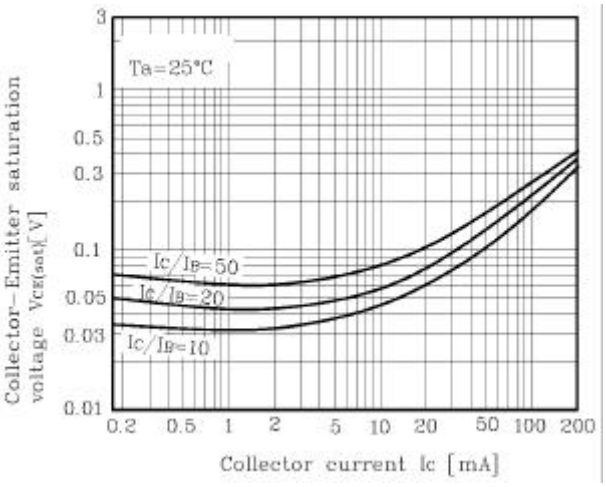


Fig 5. h_{FE} - Ic