TECHNICAL DATA

SSN3904

NPN Silicon Transistor

1. Descriptions

- General small signal amplifier
- Switching application

2. Features

· Low collector saturation voltage

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

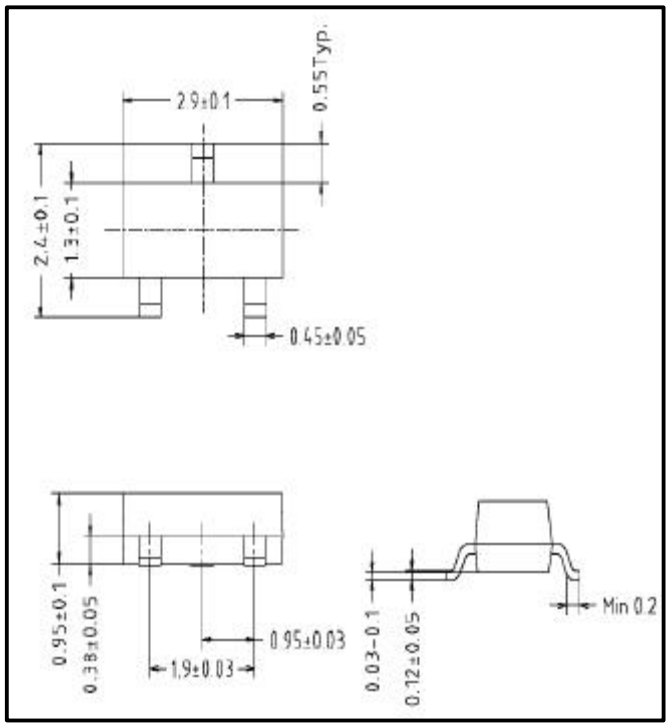
· Low output capacitance

Cob= Typ. 4pF

· Complementary to the SSN3906

3. Ordering Information

Device	Marking	Package
SSN3904	KA	SOT-23



SOT-23 Package Outline Dimension

4. Maximum ratings (Ta=25℃)

Characteristic	Symbol	Ratings	Unit
Collector-Base voltage	V_{CBO}	60	V
Collector-Emitter voltage	V_{CEO}	40	V
Emitter-Base voltage	V_{EBO}	6	V
Collector current	I_C	100	mA
Collector dissipation	P_C^*	350	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=10μA, I_E=0	60	-	-	V
Collector-Emitter breakdown voltage	BV_{CEO}	I_C=1mA, I_B=0	40	-	-	V
Emitter-Base breakdown voltage	BV_{EBO}	I_E=10μA, I_C=0	6	-	-	V
Collector cut-off current	I_{CBO}	V_{CB}=60V, I_E=0	-	-	0.1	μA
DC current gain	h_{FE}	V_{CE}=1V, I_C=10mA	100	-	300	-
Collector-Emitter saturation voltage	$V_{CE(sat)}$	I_C=50mA, I_B=5mA	-	-	0.4	V
Transition frequency	f_T	V_{CE}=20V, I_C=10mA	300	-	-	MHz
Collector output capacitance	C_{ob}	V_{CE}=5V, I_E=0, f=1MHz	-	-	4	pF

6. Electrical Characteristics Curves

Fig 1. Pc - Ta

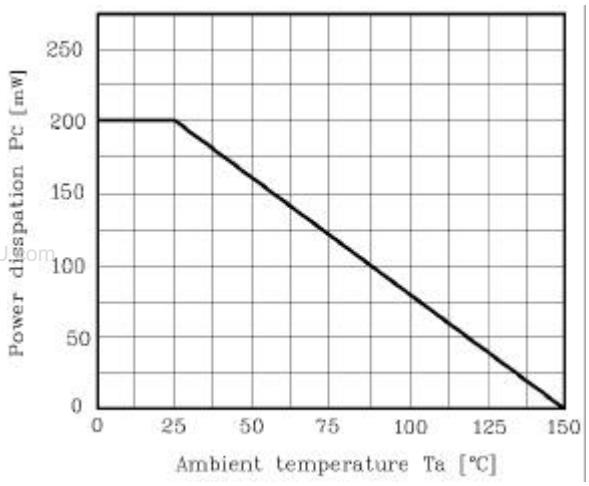


Fig 2. Ic - V_{BE}

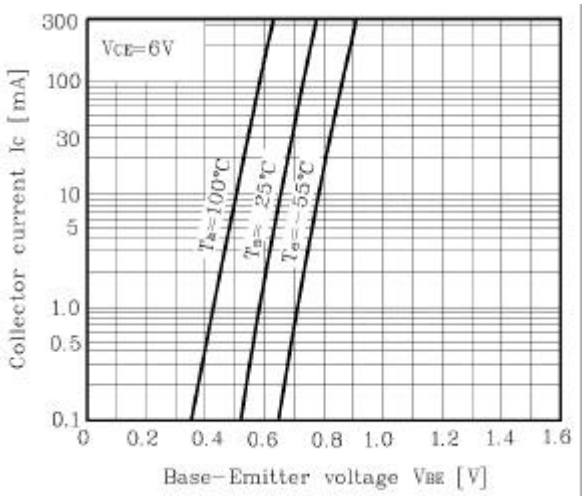


Fig 3. Ic – V_{CE}

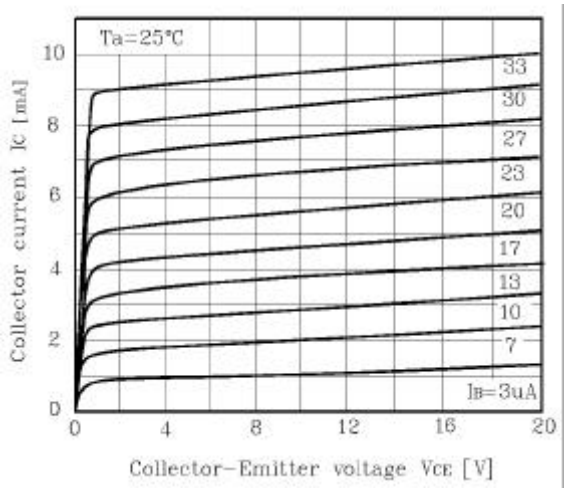


Fig 4. $V_{CE(sat)}$ - Ic

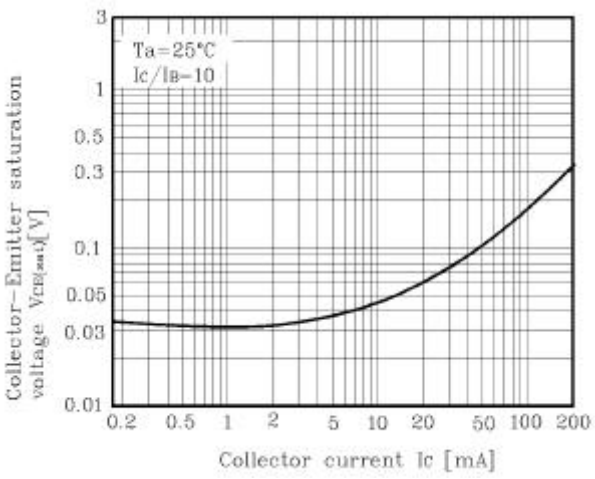


Fig 5. h_{FE} - Ic