SSCN4617GS8

NPN Switching Transistor

➢ Features

VCB	VCE	VEB	IC
60V	50V	7V	150mA

➢ Description

The NPN Transistor is designed for use in linear and switching applications. The device is housed in the SOT-523 package, which is designed for telephony and professional communication equipment.

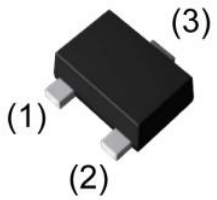
➢ Applications

- General purpose switching and amplification
- Telephony and professional communication equipment

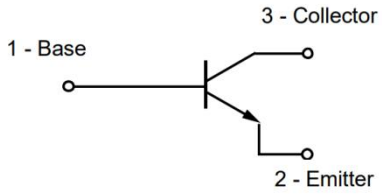
➢ Ordering Information

Device	Package	Shipping
SSCN4617GS8	SOT-523	3000/Reel

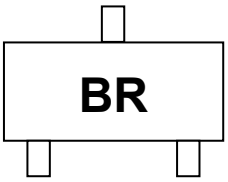
➢ Pin configuration



SOT-523



Circuit Diagram



Marking(Top View)

➢ Absolute Maximum Ratings(T_A=25℃ unless otherwise noted)

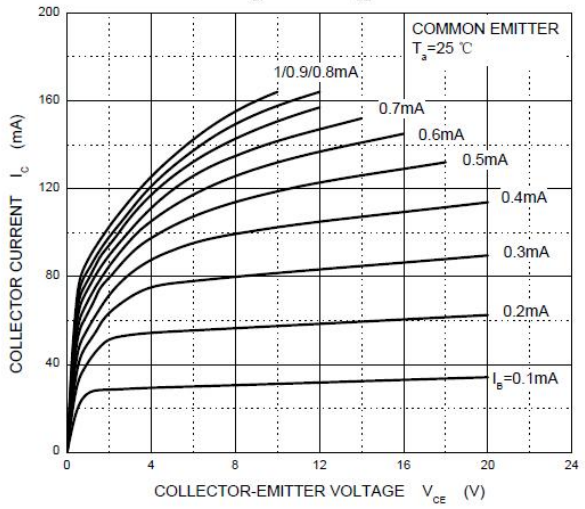
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector- Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current-Continuous	I_C	150	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-55 to 150	℃

➢ Electrical Characteristics (T_A=25℃ unless otherwise noted)

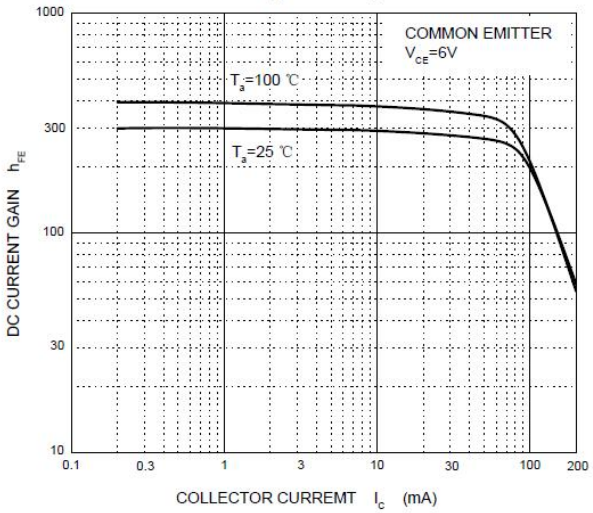
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=50uA,I_E=0	60			V
Collector-emitter Breakdown Voltage	BV_{CEO}	I_C=1mA,I_B=0	50			V
Emitter -Base Breakdown Voltage	BV_{EBO}	I_E=50uA,I_C=0	7			V
Collector Cutoff Current	I_{CBO}	V_{CB}=60V, I_E=0			0.1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=7V,I_C=0			0.1	μA
DC Current Gain	h_{FE}	V_{CE}=6V,I_C=1mA	120		560	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=50mA,I_B=5mA			0.4	V
Transition frequency	f_T	V_{CE}=12V,I_C=2mA f=100MHz		180		MHz
Collector output capacitance	C_{ob}	V_{CB}=12V, I_E=0, f=1MHz		2	3.5	pF

➢ Typical Performance Characteristics (T_A=25℃ unless otherwise noted)

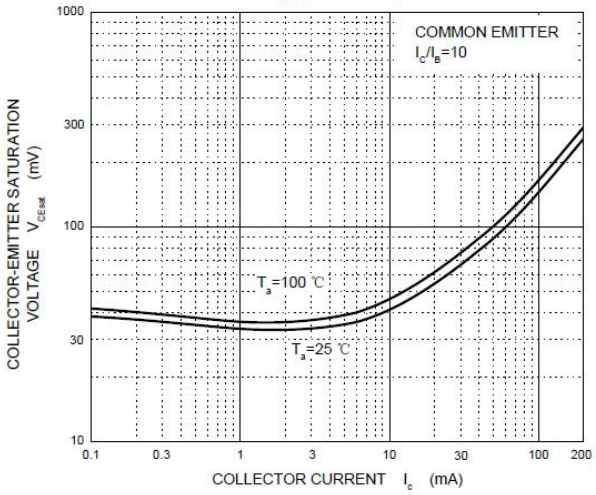
I_C — V_{CE}



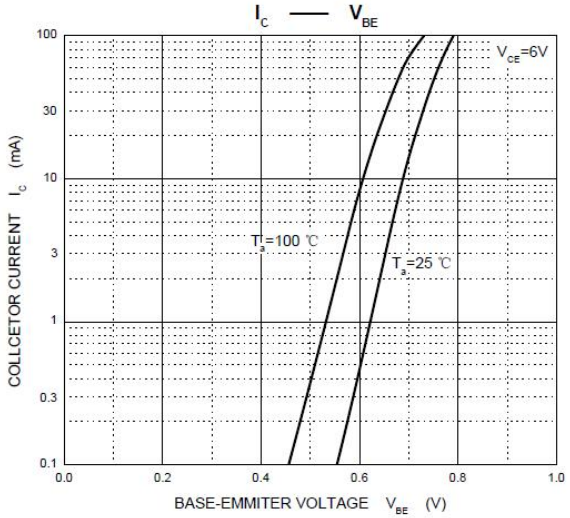
h_{FE} — I_C



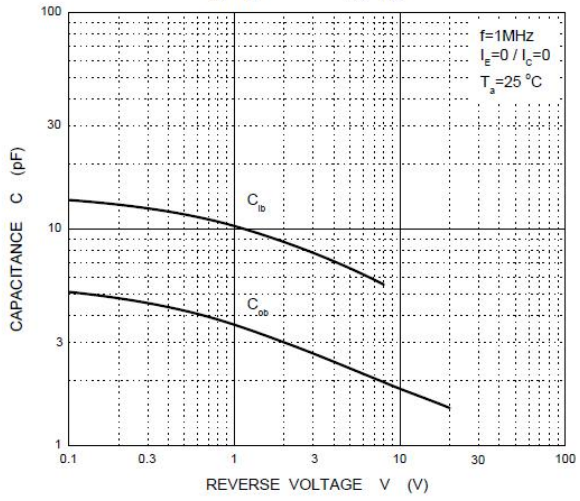
V_{CEsat} — I_c



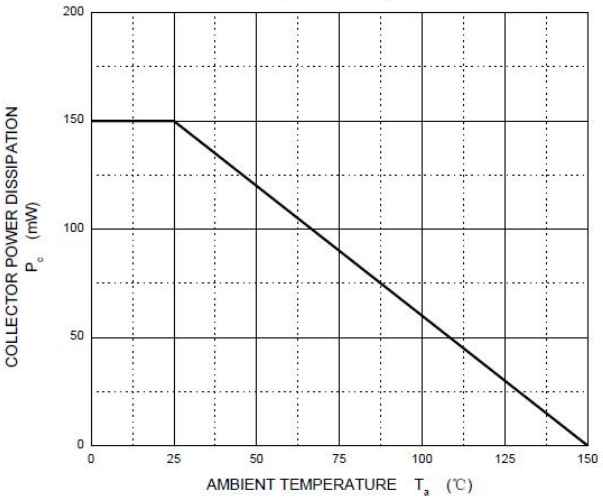
I_C — V_{BE}



C_{ob}/C_{ib} — V_{CB}/V_{EB}

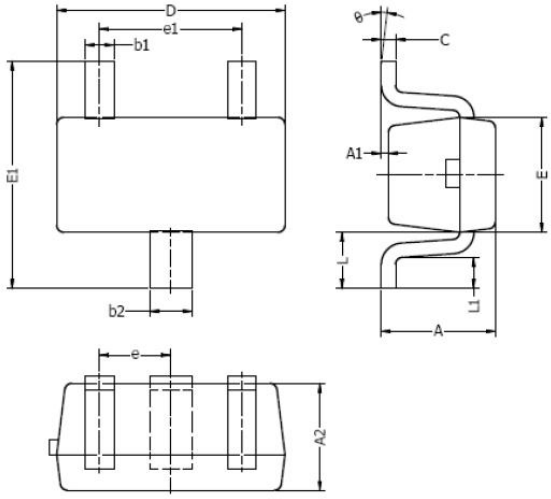


P_c — T_a



Package Information

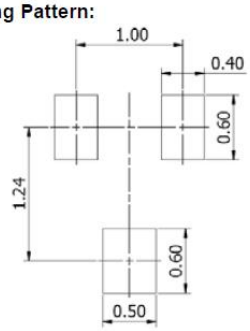
SOT-523



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.70	0.90	0.028	0.035
A1	0.00	0.10	0.000	0.004
A2	0.70	0.80	0.028	0.031
b1	0.15	0.25	0.006	0.010
b2	0.25	0.35	0.010	0.014
c	0.10	0.20	0.004	0.008
D	1.50	1.70	0.059	0.067
E	0.70	0.90	0.028	0.035
E1	1.45	1.75	0.057	0.069
e	0.50 TYP.		0.020 TYP.	
e1	0.90	1.10	0.035	0.043
L	0.40 REF.		0.016 REF.	
L1	0.10	0.30	0.004	0.012
θ	0°	8°	0°	8°

NOTES:
1. Above package outline conforms to JEITA EAIJ ED-7500A SC-75A.
2. Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

Typical Soldering Pattern:



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