



## 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.

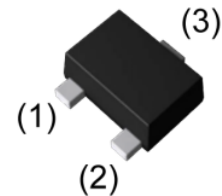
#### ➤ Applications

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

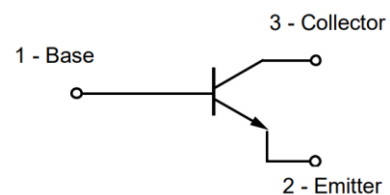
#### ➤ Ordering Information

Device	Package	Shipping
SSCN4617GS8	SOT-523	3000/Reel

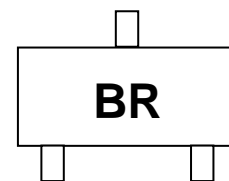
#### ➤ Pin configuration



**SOT-523**



**Circuit Diagram**



**Marking(Top View)**



➤ **Absolute Maximum Ratings**( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

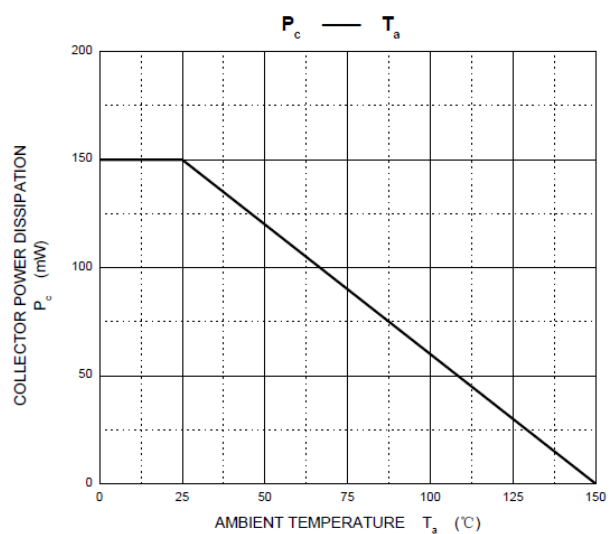
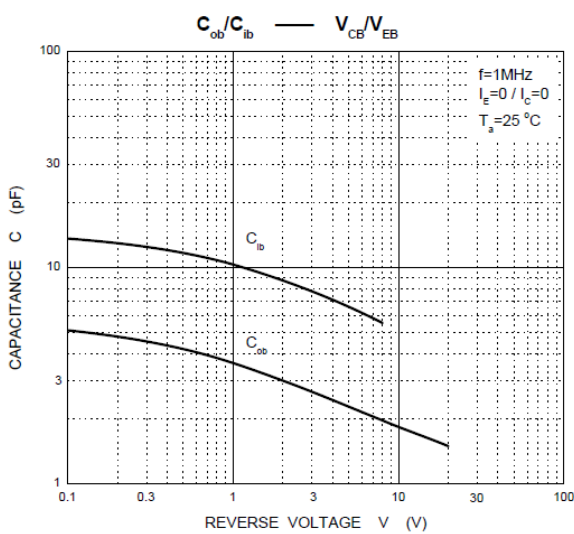
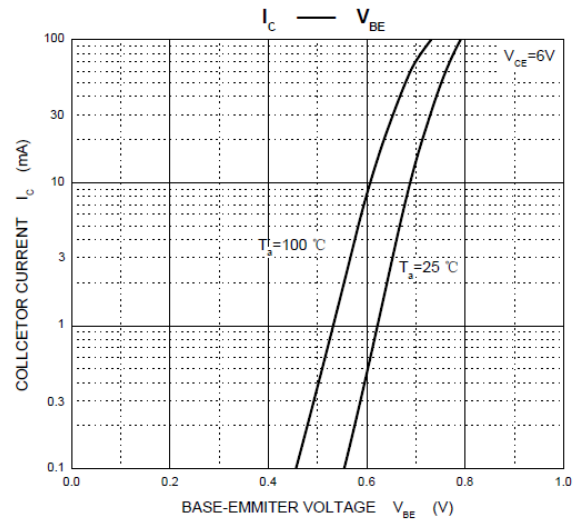
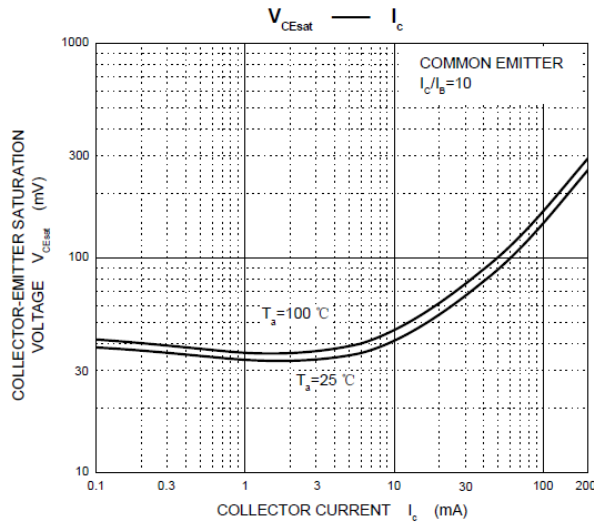
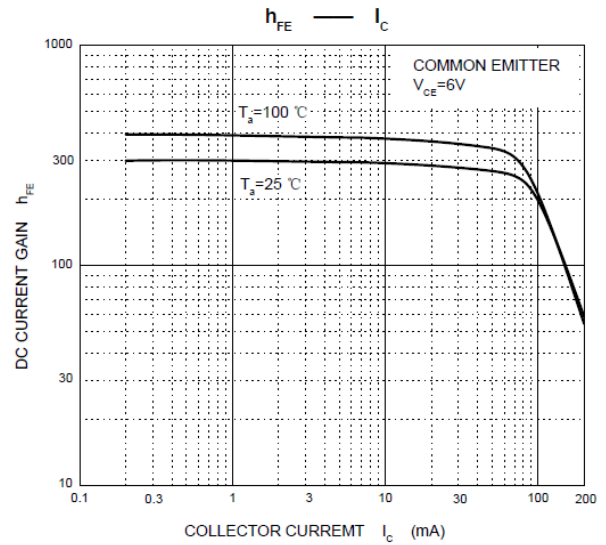
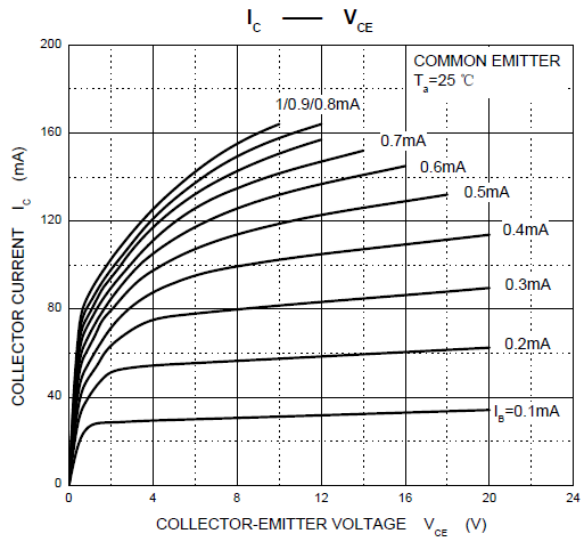
Parameter	Symbol	Value	Unit
Collector-Base Voltage	$V_{CB0}$	60	V
Collector- Emitter Voltage	$V_{CEO}$	50	V
Emitter-Base Voltage	$V_{EBO}$	7	V
Collector Current-Continuous	$I_C$	150	mA
Collector Power Dissipation	$P_C$	150	mW
Junction Temperature	$T_J$	150	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-55 to 150	$^{\circ}\text{C}$

➤ **Electrical Characteristics** ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	$BV_{CB0}$	$I_C=50\mu\text{A}, I_E=0$	60			V
Collector-emitter Breakdown Voltage	$BV_{CEO}$	$I_C=1\text{mA}, I_B=0$	50			V
Emitter -Base Breakdown Voltage	$BV_{EBO}$	$I_E=50\mu\text{A}, I_C=0$	7			V
Collector Cutoff Current	$I_{CB0}$	$V_{CB}=60\text{V}, I_E=0$			0.1	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=7\text{V}, I_C=0$			0.1	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE}=6\text{V}, I_C=1\text{mA}$	120		560	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=50\text{mA}, I_B=5\text{mA}$			0.4	V
Transition frequency	$f_T$	$V_{CE}=12\text{V}, I_C=2\text{mA}$ $f=100\text{MHz}$		180		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=12\text{V}, I_E=0, f=1\text{MHz}$		2	3.5	pF

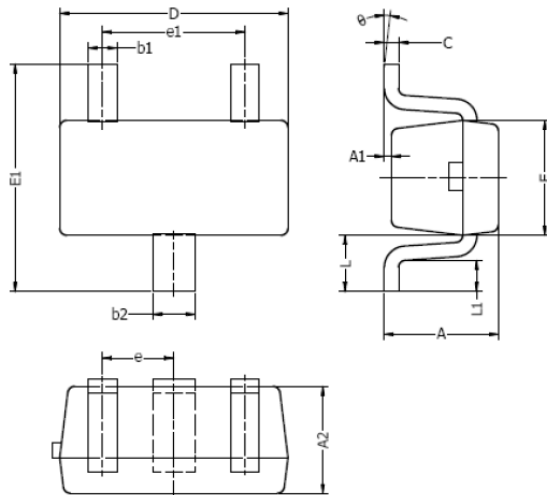


➤ Typical Performance Characteristics ( $T_A=25^\circ\text{C}$  unless otherwise noted)

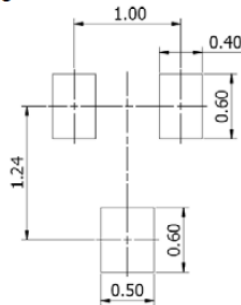


## ● Package Information

### SOT-523



Typical Soldering Pattern:



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.

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