



## SSCP9015GS6

### PNP Switching Transistor

#### ➤ Features

VCB	VCE	VEB	IC
-50V	-45V	-5V	-100mA

#### ➤ Description

The PNP Transistor is designed for use in linear and switching applications. The device is housed in the SOT-23 package, which is designed for telephony and professional communication equipment.

#### ➤ Applications

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

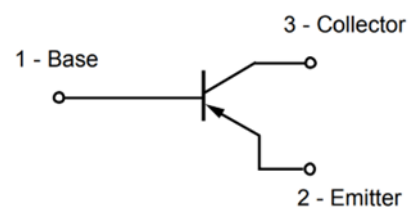
#### ➤ Ordering Information

Device	Package	Shipping
SSCP9015GS6	SOT-23	3000/Reel

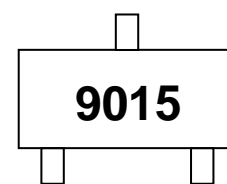
#### ➤ Pin configuration



**SOT-23**



**Circuit Diagram**



**Marking(Top View)**



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

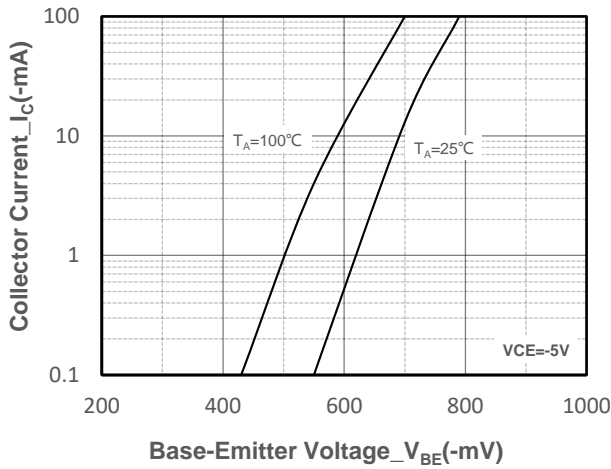
Parameter	Symbol	Value	Unit
Collector-Base Voltage	$V_{CB0}$	-50	V
Collector- Emitter Voltage	$V_{CEO}$	-45	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current-Continuous	$I_c$	-100	mA
Collector Power Dissipation	$P_C$	450	mW
Junction Temperature	$T_J$	150	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-55 to 150	$^{\circ}\text{C}$

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

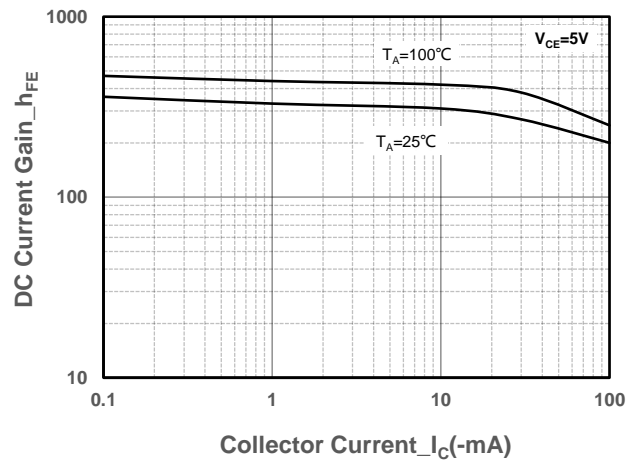
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	$BV_{CB0}$	$I_c=-50\mu\text{A}, I_E=0$	-50			V
Collector-emitter Breakdown Voltage	$BV_{CEO}$	$I_c=-1\text{mA}, I_B=0$	-45			V
Emitter -Base Breakdown Voltage	$BV_{EBO}$	$I_E=-50\mu\text{A}, I_C=0$	-5			V
Collector Cutoff Current	$I_{CB0}$	$V_{CB}=-50\text{V}, I_E=0$			-100	nA
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=-5\text{V}, I_C=0$			-100	nA
DC Current Gain	$h_{FE}$	$V_{CE}=-5\text{V}, I_C=-1\text{mA}$	60		600	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_c=-100\text{mA}, I_B=-5\text{mA}$			-0.3	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_c=-100\text{mA}, I_B=-5\text{mA}$			-1.0	V
Transition frequency	$f_T$	$V_{CE}=-5\text{V}, I_C=-10\text{mA}$ $f=30\text{MHz}$	100			MHz



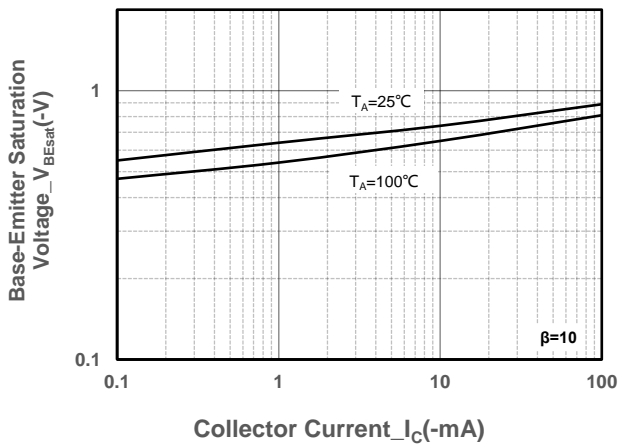
➤ **Typical Performance Characteristics ( $T_A=25^\circ\text{C}$  unless otherwise noted)**



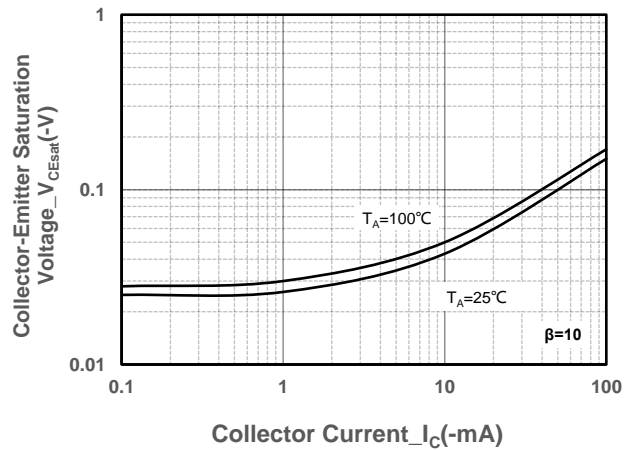
**Collector Current vs. Base-Emitter Voltage**



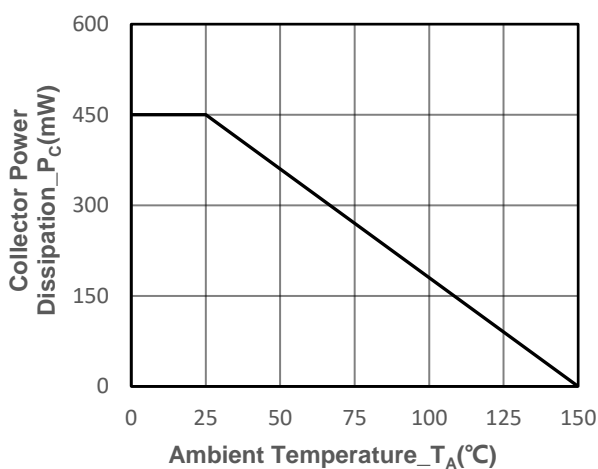
**DC Current Gain vs. Collector Current**



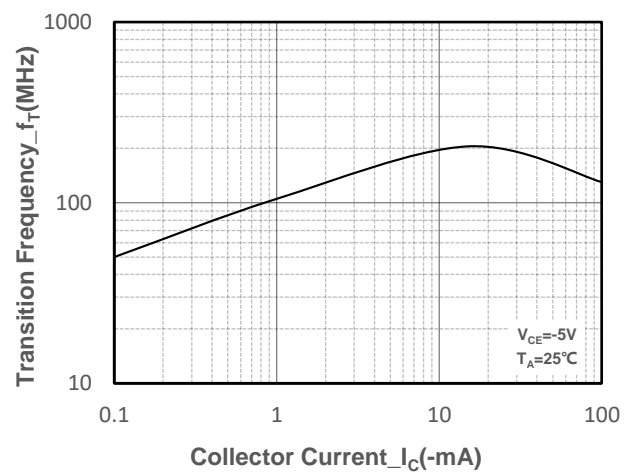
**$V_{BE(sat)}$  vs. Collector Current**



**$V_{CE(sat)}$  vs. Collector Current**



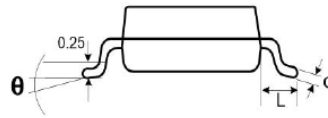
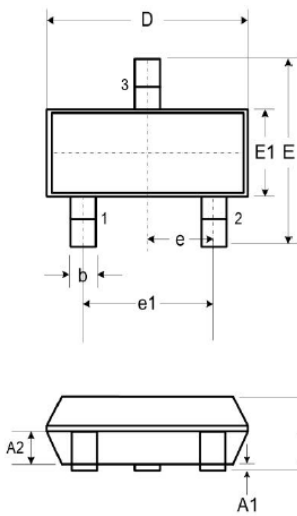
**Power derating vs. Ambient temperature**



**Transition Frequency vs. Collector Current**

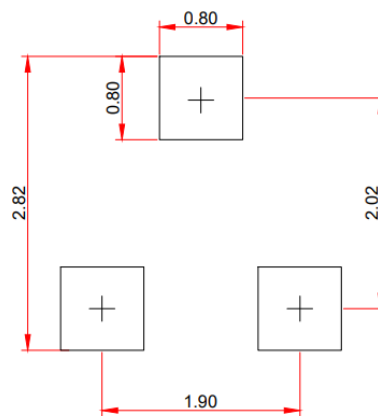


## ● Package Information



DIM	Millimeters		
	Min.	Typ.	Max.
A	0.89	-	1.12
A1	0.01	-	0.10
A2	0.88	0.95	1.02
b	0.30	-	0.51
c	0.08	-	0.18
D	2.80	2.90	3.04
E	2.10	2.37	2.64
E1	1.20	1.30	1.40
e	0.95		
e1	1.90		
L	0.40	0.50	0.60
L1	0.55		
N	3		
θ	0°	-	8°

## Recommended Pad outline(Unit: mm)





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