



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.

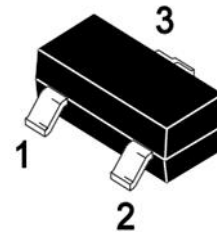
➤ Applications

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

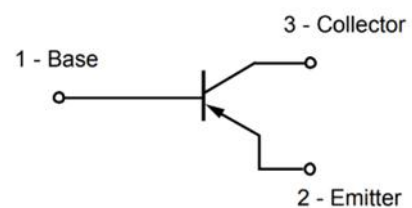
➤ Ordering Information

Device	Package	Shipping
SSCP9015GS6	SOT-23	3000/Reel

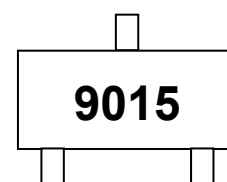
➤ Pin configuration



SOT-23



Circuit Diagram



Marking(Top View)



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

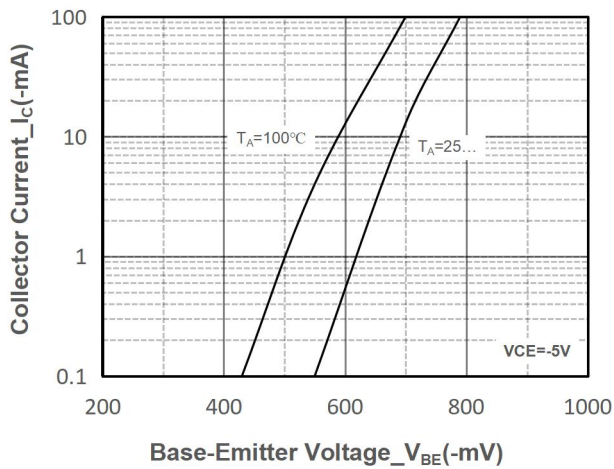
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CB0}	-50	V
Collector- Emitter Voltage	V_{CE0}	-45	V
Emitter-Base Voltage	V_{EB0}	-5	V
Collector Current-Continuous	I_C	-100	mA
Collector Power Dissipation	P_C	450	mW
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 to 150	$^{\circ}\text{C}$

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

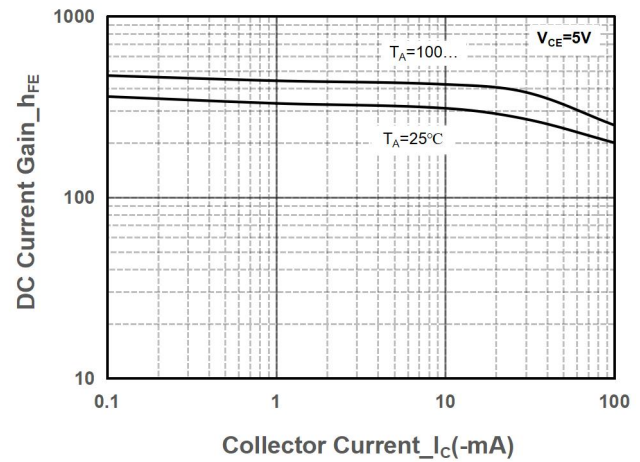
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	BV_{CB0}	$I_C=-50\mu\text{A}$, $I_E=0$	-50			V
Collector-emitter Breakdown Voltage	BV_{CE0}	$I_C=-1\text{mA}$, $I_B=0$	-45			V
Emitter -Base Breakdown Voltage	BV_{EB0}	$I_E=-50\mu\text{A}$, $I_C=0$	-5			V
Collector Cutoff Current	I_{CB0}	$V_{CB}=-50\text{V}$, $I_E=0$			-100	nA
Emitter Cutoff Current	I_{EB0}	$V_{EB}=-5\text{V}$, $I_C=0$			-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



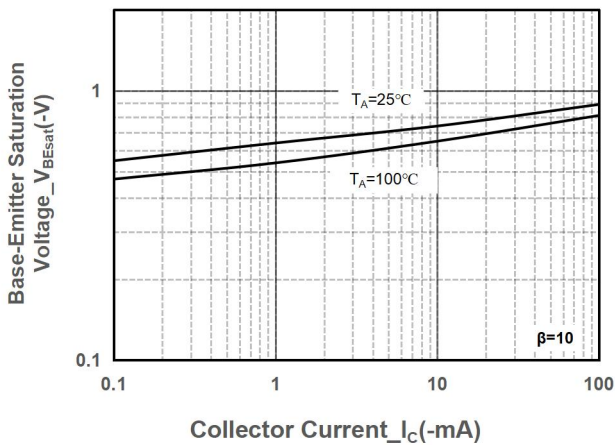
➤ Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)



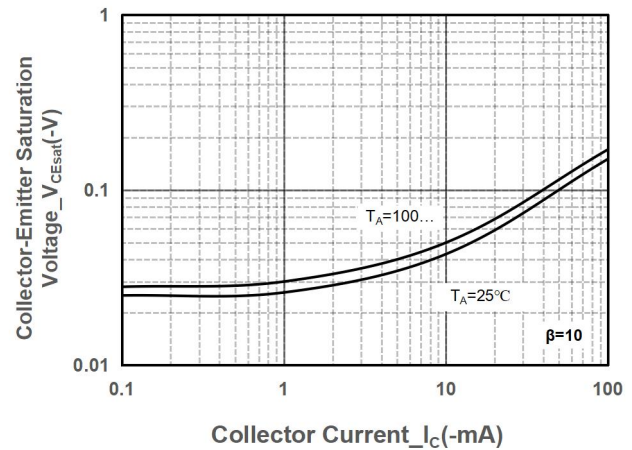
Collector Current vs. Base-Emitter Voltage



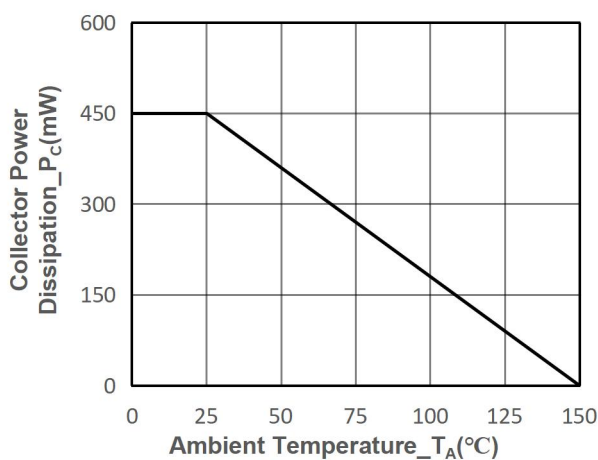
DC Current Gain vs. Collector Current



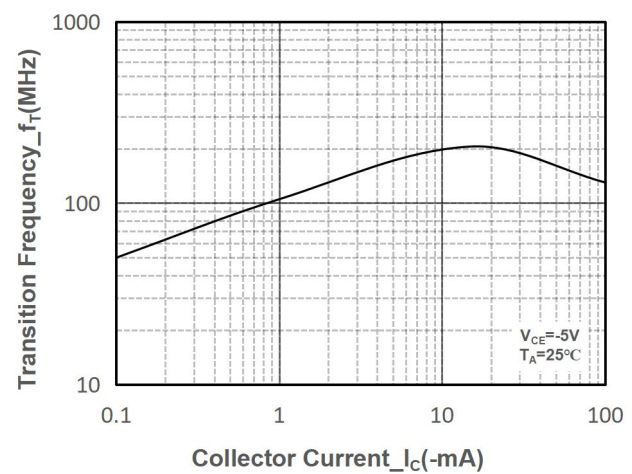
$V_{BE(sat)}$ vs. Collector Current



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



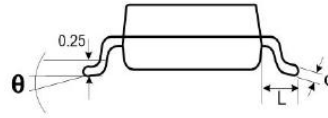
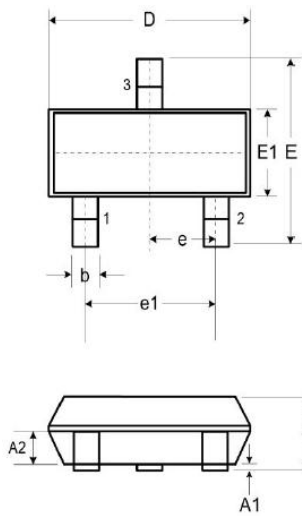
Power derating vs. Ambient temperature



Transition Frequency vs. Collector Current

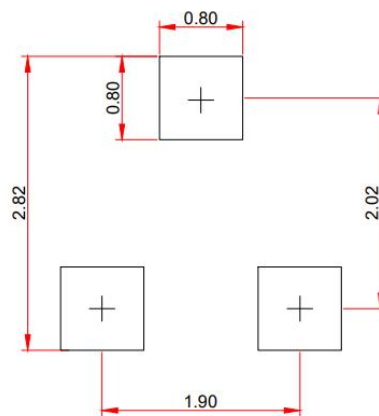


● Package Information



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
e1	1.90		
e	0.95		
L	0.40	0.50	0.60
L1	0.55		
N	3		
θ	0°	-	8°

Recommended Pad outline (Unit: mm)





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