

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.

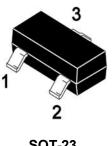
Applications

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

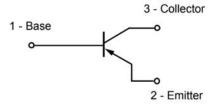
Ordering Information

Device	Package	Shipping
SSCP9015GS6	SOT-23	3000/Reel

Pin configuration



SOT-23



Circuit Diagram





ightarrow Absolute Maximum Ratings(T_A=25°C unless otherwise noted)

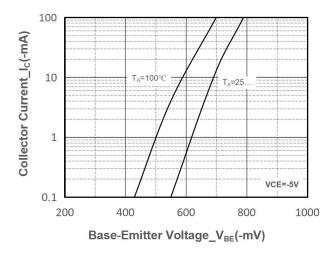
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	-50	V
Collector- Emitter Voltage	V _{CEO}	-45	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current-Continuous	Ic	-100	mA
Collector Power Dissipation	Pc	450	mW
Junction Temperature	TJ	150	$^{\circ}$
Storage Temperature	T _{STG}	-55 to 150	$^{\circ}$

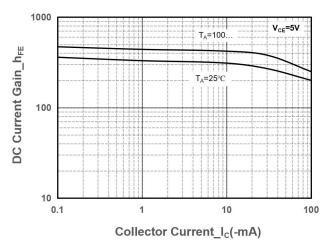
➤ Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Test Conditions	Min.	Тур.	Max.	Unit
Collector-Base Breakdown Voltage	BV _{CBO}	I _C =-50uA, I _E =0	-50			V
Collector-emitter Breakdown Voltage	BV _{CEO}	I _C =-1mA, I _B =0	-45			V
Emitter -Base Breakdown Voltage	BV _{EBO}	I _E =-50uA, I _C =0	-5			V
Collector Cutoff Current	I _{CBO}	V _{CB} =-50V, I _E =0			-100	nA
Emitter Cutoff Current	I _{EBO}	V _{EB} =-5V, I _C =0			-100	nA
DC Current Gain	h _{FE}	V _{CE} =-5V, I _C =-1mA	60		600	
Collector-Emitter Saturation Voltage	V _{CE (sat)}	I _C =-100mA, I _B =-5mA			-0.3	V
Base-Emitter Saturation Voltage	V _{BE} (sat)	I _C =-100mA, I _B =-5mA			-1.0	V
Transition frequency	f⊤	V _{CE} =-5V, I _C =-10mA	100			MHz
	''	f=30MHz				



\succ Typical Performance Characteristics (T_A=25°C unless otherwise noted)





Collector Current vs. Base-Emitter Voltage

Base-Emitter Saturation

Voltage _Versat(-V)

1

0.1

1

1

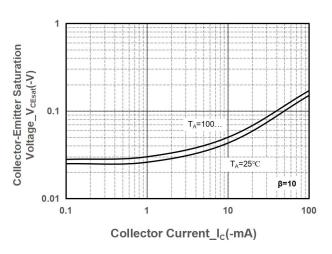
1

10

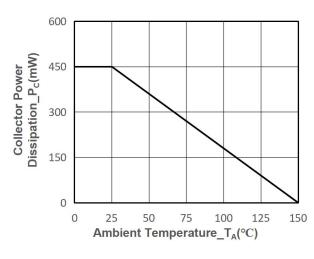
100

Collector Current_Ic(-mA)

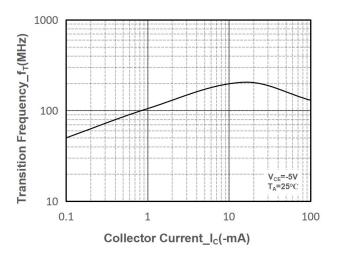
DC Current Gain vs. Collector Current



V_{BE (sat)} vs. Collector Current



V_{CE (sat)} vs. Collector Current

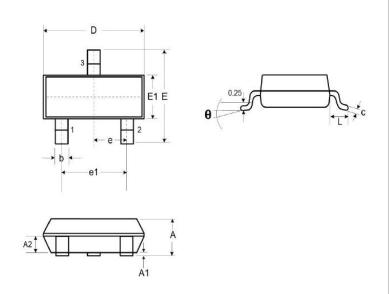


Power derating vs. Ambient temperature

Transition Frequency vs. Collector Current

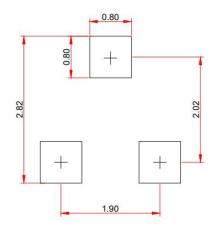


Package Information



DIM	Millimeters			
	Min.	Тур.	Max.	
Α	0.89	-	1.12	
A 1	0.01	ı	0.10	
A2	0.88	0.95	1.02	
b	0.30	-	0.51	
С	0.08	ı	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		
е	0.95			
L	0.40	0.50	0.60	
L1	0.55			
N	3			
θ	0°	-	8°	

Recommended Pad outline (Unit: mm)





DISCLAIMER

SSCSEMI RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. SSCSEMI DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICIENCE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

THE GRAPHS PROVIDED IN THIS DOCUMENT ARE STATISTICAL SUMMARIES BASED ON A LIMITED NUMBER OF SAMPLES AND ARE PROVIDED FOR INFORMATIONAL PURPOSE ONLY. THE PERFORMANCE CHARACTERISTICS LISTED IN THEM ARE NOT TESTED OR GUARANTEED. IN SOME GRAPHS, THE DATA PRESENTED MAY BE OUTSIDE THE SPECIFIED OPERATING RANGE (E.G. OUTSIDE SPECIFIED POWER SUPPLY RANGE) AND THEREFORE OUTSIDE THE WARRANTED RANGE.

OUR PRODUCT SPECIFICATIONS ARE ONLY VALID IF OBTAINED THROUGH THE COMPANY'S OFFICIAL WEBSITE, CRM SYSTEM, OR OUR SALES PERSONNEL CHANNELS. IF CHANGES OR SPECIAL VERSIONS ARE INVOLVED, THEY MUST BE STAMPED WITH A QUALITY SEAL AND MARKED WITH A SPECIAL VERSION NUMBER TO BE VALID.