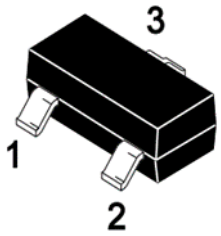
SSCP5401GS6

PNP Switching Transistor

➢ Features

VCB	VCE	VEB	IC
-160V	-150V	-6V	-600mA

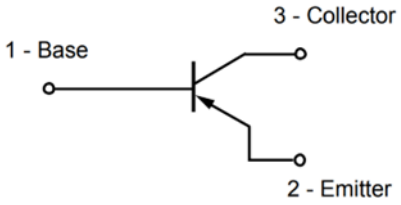
➢ Pin configuration



SOT-23

➢ Description

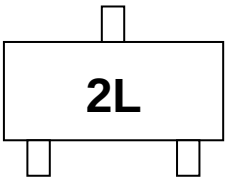
This device is designed for general-purpose high-voltage amplifiers and gas discharge display drivers. It is Ideal for medium power amplification and switching.



Circuit Diagram

➢ Applications

- General-purpose high-voltage amplifiers
- Gas discharge display drivers
- Medium power amplification and switching



Marking(Top View)

➢ Ordering Information

Device	Package	Shipping
SSCP5401GS6	SOT-23	3000/Reel

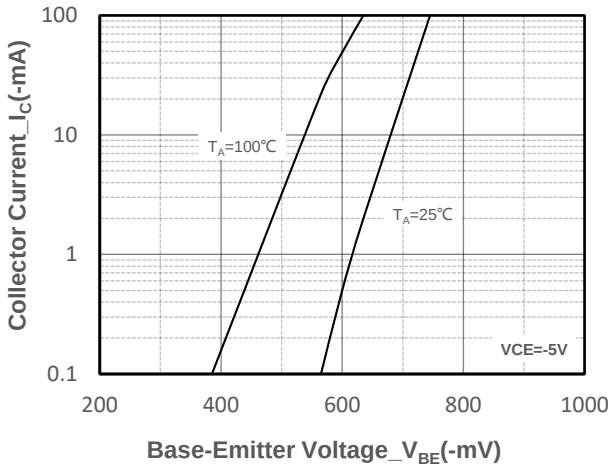
➢ Absolute Maximum Ratings(T_A=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-160	V
Collector- Emitter Voltage	V_{CEO}	-150	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current-Continuous	I_C	-600	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-55 to 150	℃

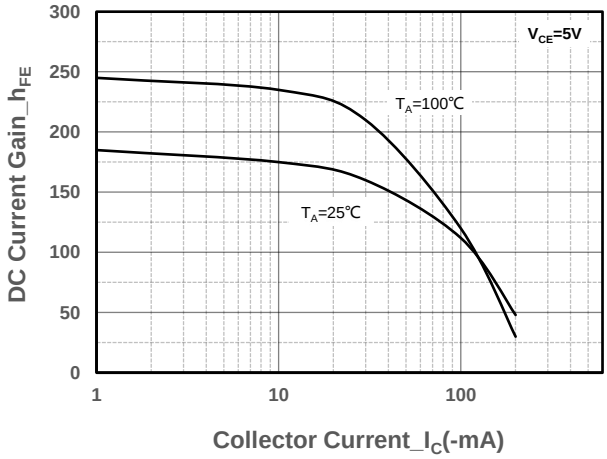
➢ Electrical Characteristics (T_A=25℃ unless otherwise noted)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=-100uA,I_E=0	-160			V
Collector-emitter Breakdown Voltage	BV_{CEO}	I_C=-1mA,I_B=0	-150			V
Emitter -Base Breakdown Voltage	BV_{EBO}	I_E=-100uA,I_C=0	-5			V
Collector Cutoff Current	I_{CBO}	V_{CB}=-120V,I_E=0			-50	nA
Emitter Cutoff Current	I_{EBO}	V_{EB}=-4V,I_C=0			-50	nA
DC Current Gain	h_{FE}	V_{CE}=-5V,I_C=-10mA	100		300	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-50mA,I_B=-5mA			-0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=-50mA,I_B=-5mA			-1.0	V
Transition frequency	f_T	V_{CE}=-5V,I_C=-10mA f=30MHz	100		300	MHz

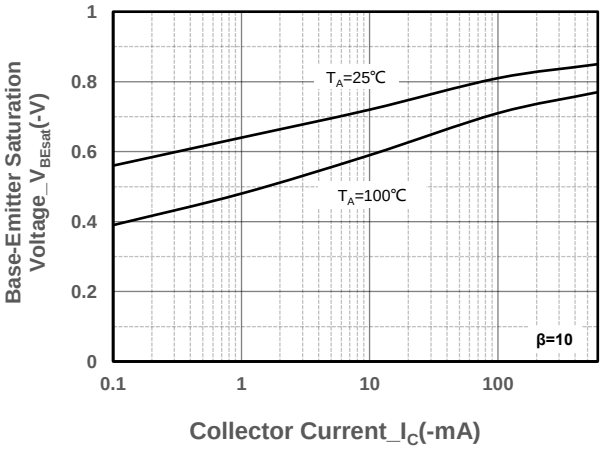
➢ Typical Performance Characteristics (T_A=25℃ unless otherwise noted)



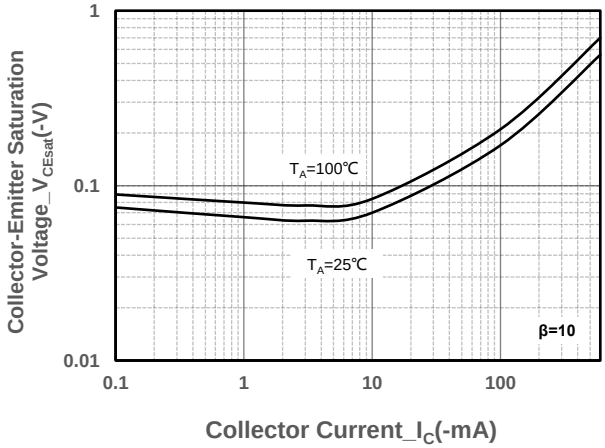
Collector Current vs. Base-Emitter Voltage



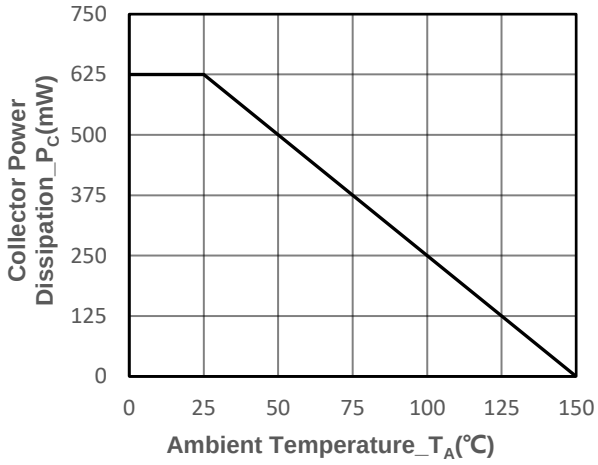
DC Current Gain vs. Collector Current



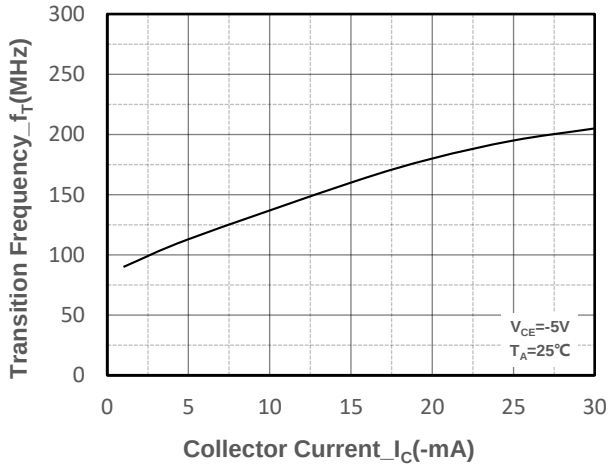
$V_{BE(sat)}$ vs. Collector Current



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

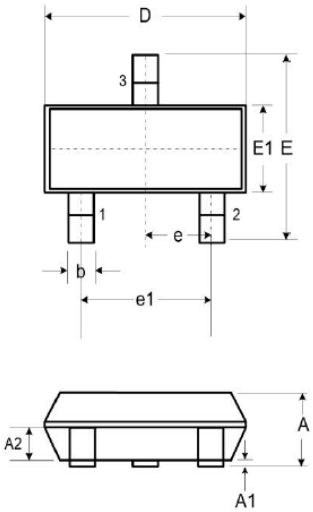


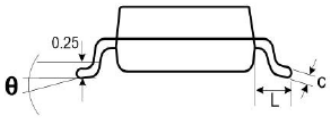
Power derating vs. Ambient temperature



Transition Frequency vs. Collector Current

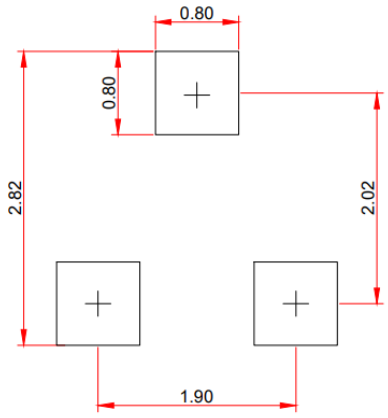
- **Package Information**





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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