



SSCP5401GSB

High Frequency High Gain DUAL PNP Power BJT

➤ Features

VCB	VCE	VEB	IC
-160V	-150V	-5V	-200mA

➤ 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.

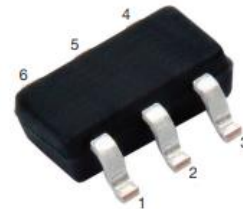
➤ Applications

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

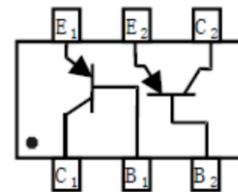
➤ Ordering Information

Device	Package	Shipping
SSCP5401GSB	SOT-23-6L	3000/Reel

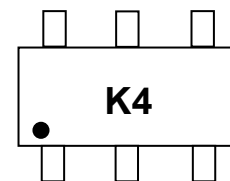
➤ Pin configuration



SOT-23-6L



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_{CBO}	-160	V
Collector- Emitter Voltage	V_{CEO}	-150	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current-Continuous	I_C	-200	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_J	-55 to 150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 to 150	$^{\circ}\text{C}$

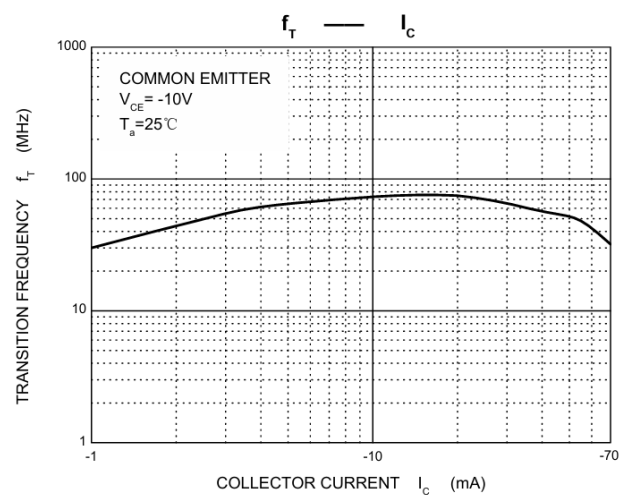
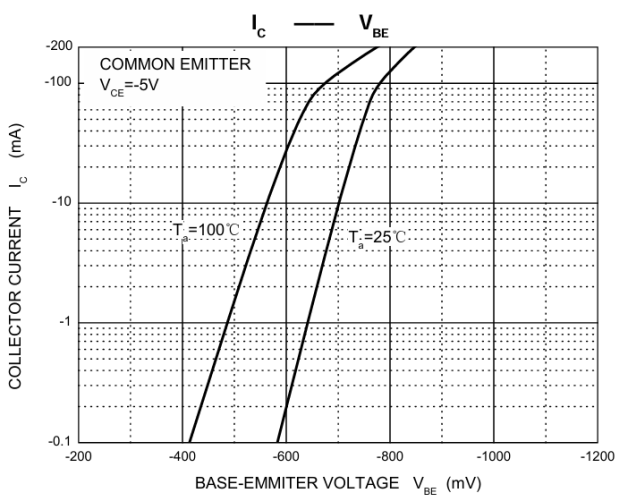
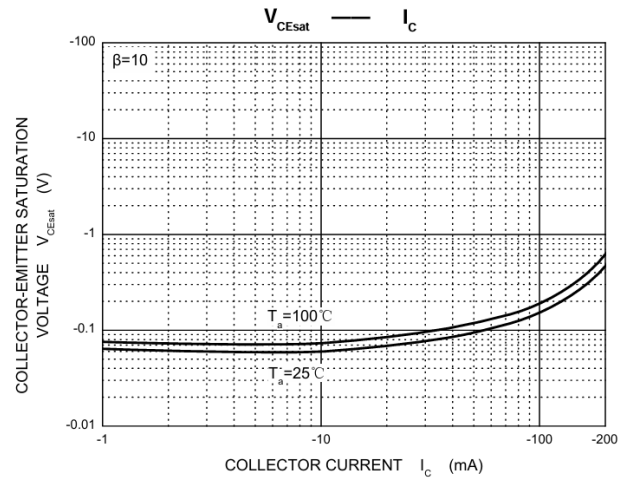
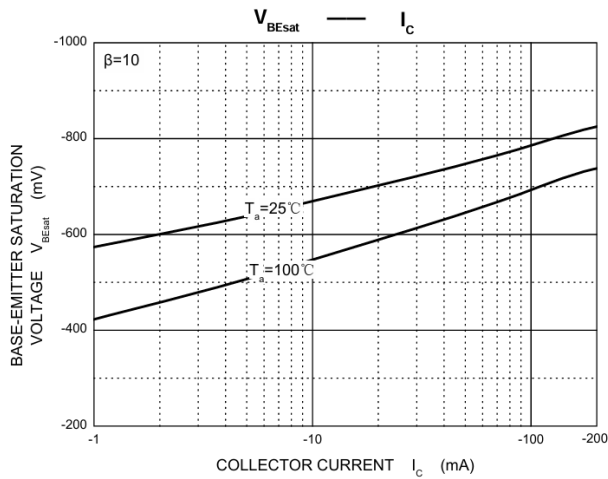
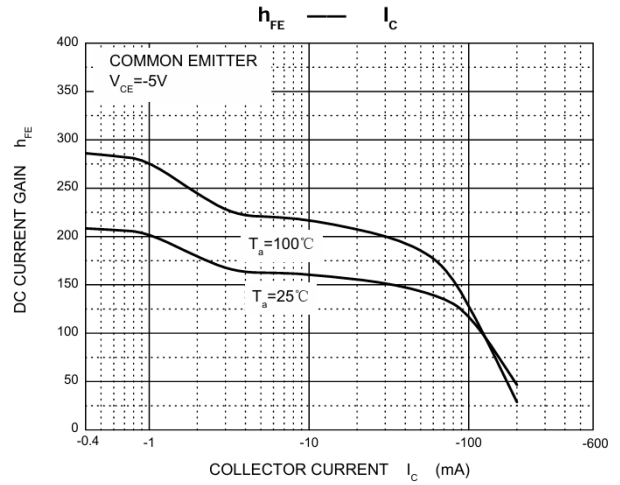
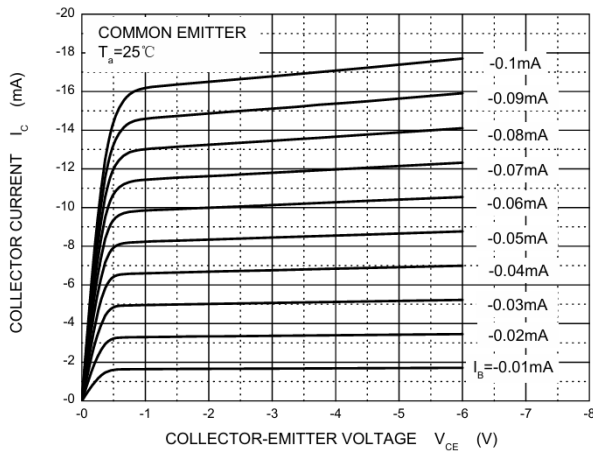
➤ **Electrical Characteristics** ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

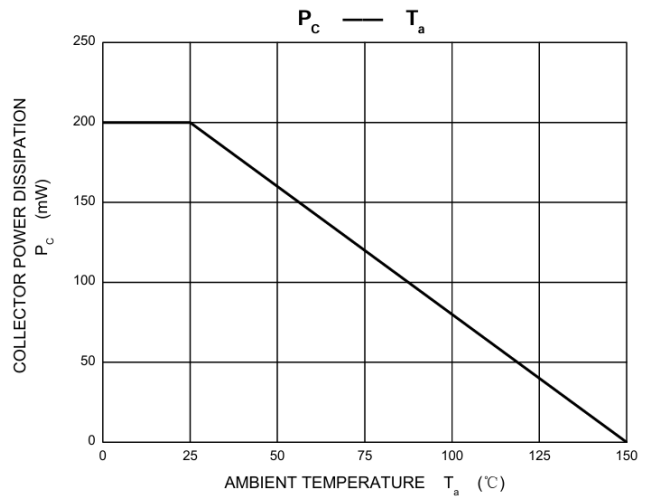
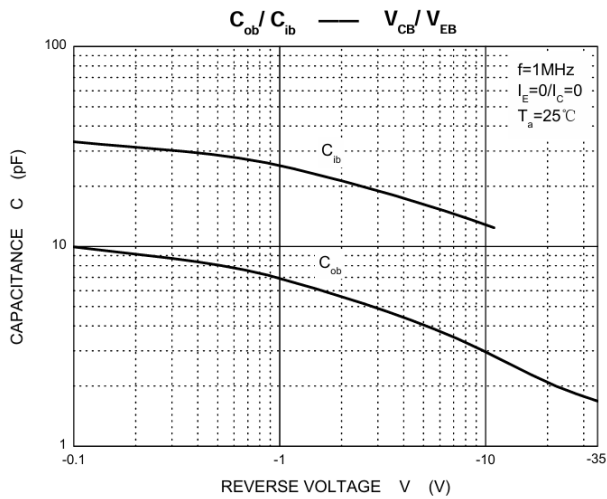
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=-0.1\text{mA}$, $I_E=0$	-160			V
Collector-emitter Breakdown Voltage	BV_{CEO}	$I_C=-1\text{mA}$, $I_B=0$	-150			V
Emitter -Base Breakdown Voltage	BV_{EBO}	$I_E=-10\mu\text{A}$, $I_C=0$	-5			V
Collector Cutoff Current	I_{CBO}	$V_{CB}=-120\text{V}$, $I_E=0$			-0.05	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=-3\text{V}$, $I_C=0$			-0.05	μA
DC Current Gain	h_{FE1}	$V_{CE}=-5\text{V}$, $I_C=-1\text{mA}$	50			
	h_{FE2}	$V_{CE}=-5\text{V}$, $I_C=-10\text{mA}$	100		300	
	h_{FE3}	$V_{CE}=-5\text{V}$, $I_C=-50\text{mA}$	50			
Collector-Emitter Saturation Voltage	$V_{CE(sat)1}$	$I_C=-10\text{mA}$, $I_B=-1\text{mA}$			-0.2	V
	$V_{CE(sat)2}$	$I_C=-50\text{mA}$, $I_B=-5\text{mA}$			-0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)1}$	$I_C=-10\text{mA}$, $I_B=-1\text{mA}$			-1	V
	$V_{BE(sat)2}$	$I_C=-50\text{mA}$, $I_B=-5\text{mA}$			-1	V
Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}$, $I_E=0$, $f=1\text{MHz}$			6	pF



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

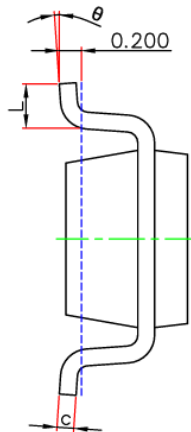
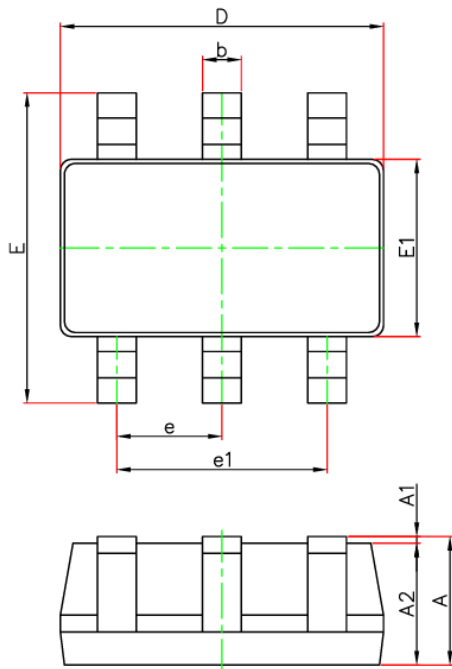
Static Characteristic





Package Information

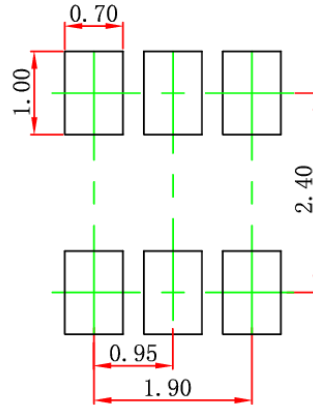
SOT-23-6L



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.820	3.020	0.111	0.119
E1	1.500	1.700	0.059	0.067
E	2.650	2.950	0.104	0.116
e	0.950(BSC)		0.037(BSC)	
e1	1.800	2.000	0.071	0.079
L	0.300	0.600	0.012	0.024
θ	0°	8°	0°	8°



➤ SOT-23-6L Suggested Pad Layout



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