SSCP5401GSG

Dual PNP Switching Transistor

➢ Features

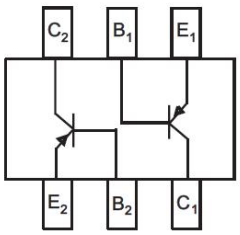
VCB	VCE	VEB	IC
-160V	-150V	-5V	-200mA

➢ Pin configuration

SOT-363

➢ Description

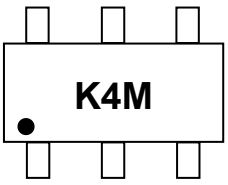
This device is designed for general-purpose high-voltage amplifiers and gas discharge display drivers. It is Ideal for medium power amplification and switching.



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
SSCP5401GSG	SOT-363	3000/Reel

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

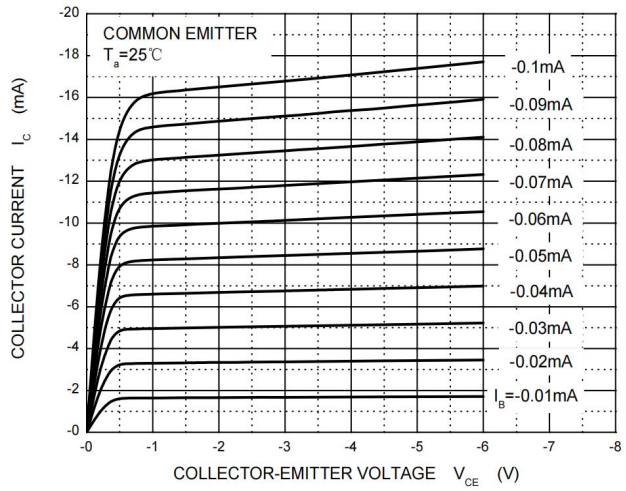
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-160	V
Collector- Emitter Voltage	V_{CEO}	-150	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current-Continuous	I_C	-200	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_J	-55 to 150	℃
Storage Temperature	T_{STG}	-55 to 150	℃

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

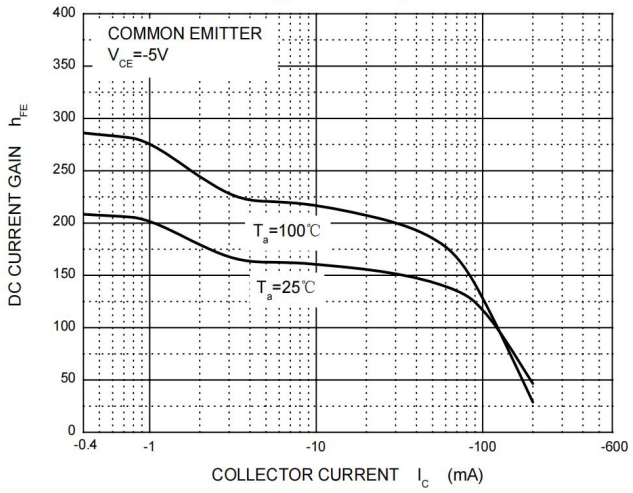
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C= -100uA,I_E=0	-160			V
Collector-emitter Breakdown Voltage	BV_{CEO}	I_C= -1mA,I_B=0	-150			V
Emitter -Base Breakdown Voltage	BV_{EBO}	I_E= -10uA,I_C=0	-5			V
Collector Cutoff Current	I_{CBO}	V_{CB}= -120V,I_E=0			-50	nA
Emitter Cutoff Current	I_{EBO}	V_{EB}= -3V,I_C=0			-50	nA
DC Current Gain	h_{FE}	V_{CE}=-5V,I_C= -1mA	50			
		V_{CE}=-5V,I_C= -10mA	100		300	
		V_{CE}=-5V,I_C= -50mA	50			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C= -10mA,I_B= -1mA			-0.2	V
		I_C= -50mA,I_B= -5mA			-0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C= -10mA,I_B= -1mA			-1.0	V
		I_C= -50mA,I_B= -5mA			-1.0	V
Output Capacitance	C_{ob}	V_{CB}=-10V, I_E=0,f=1MHz			6	pF
Transition frequency	f_T	V_{CE}=-10V,I_C=-10mA f=100MHz	100			MHz

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

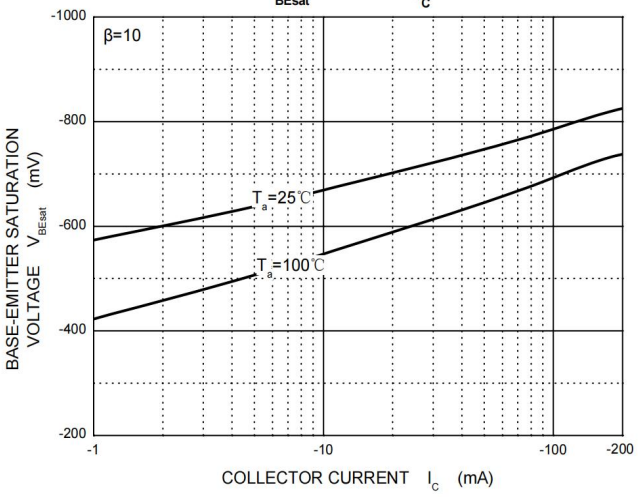
Static Characteristic



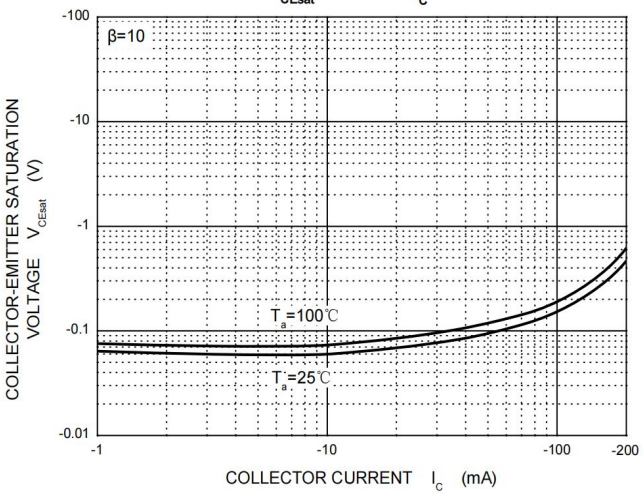
h_{FE} — I_C



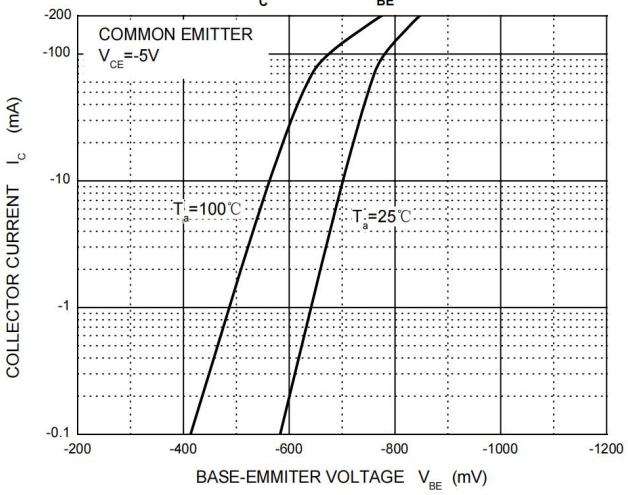
V_{BEsat} — I_C



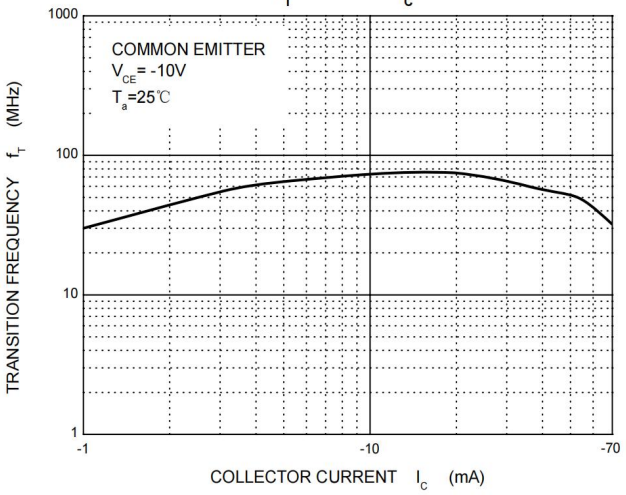
V_{CEsat} — I_C

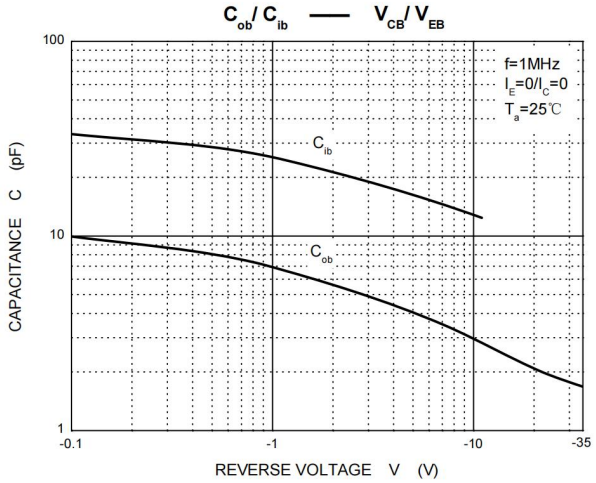


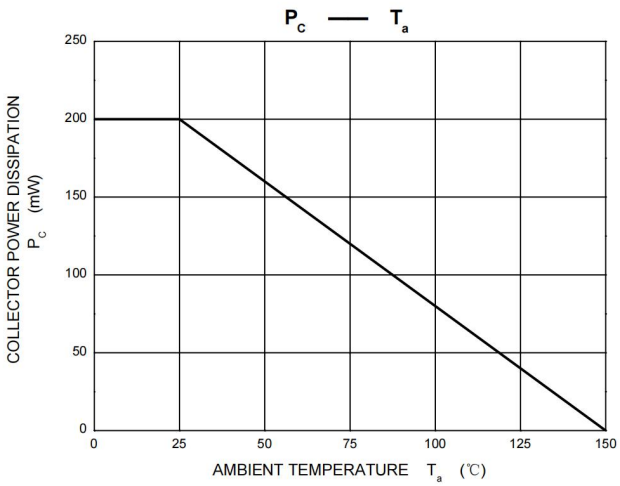
I_C — V_{BE}



f_T — I_C

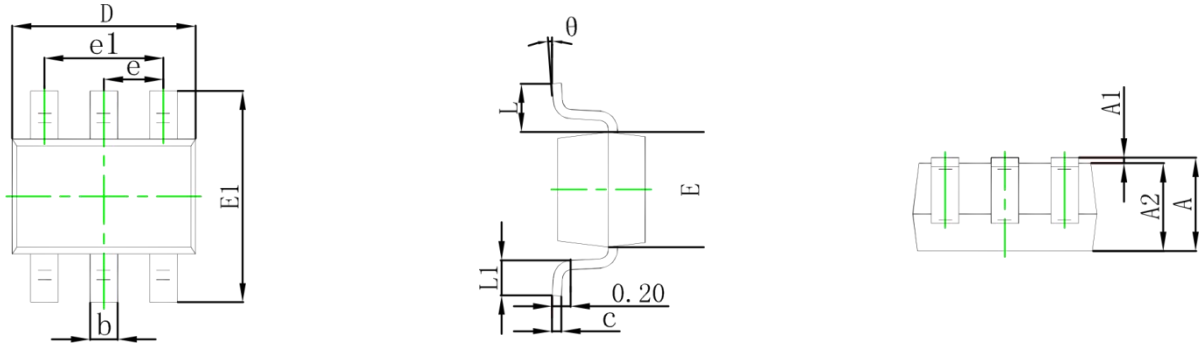






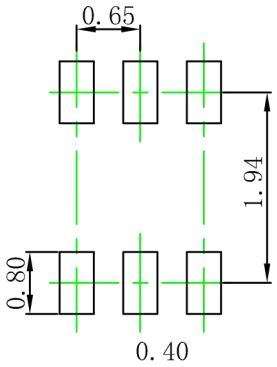
➢ Package Information

SOT-363



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

➢ **Recommended Pad outline(Unit: mm)**



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