SSCP2907AGS8

PNP Switching Transistor

➢ Features

VCB	VCE	VEB	IC
-60V	-60V	-5V	-600mA

➢ Description

This product is general usage and suitable for many different applications. It can be used for medium power amplifiers and switches requiring collector currents up to 600 mA.

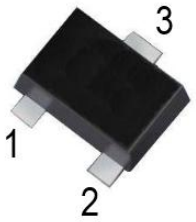
➢ Applications

- Low current and high precision circuits such preamplifiers, oscillators, current mirror configuration
- Medium power amplification and switching

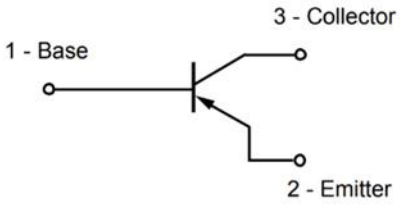
➢ Ordering Information

Device	Package	Shipping
SSCP2907AGS8	SOT-523	3000/Reel

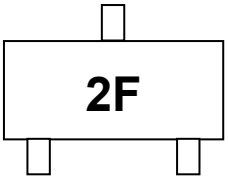
➢ Pin configuration



SOT-523



Circuit Diagram



Marking(Top View)

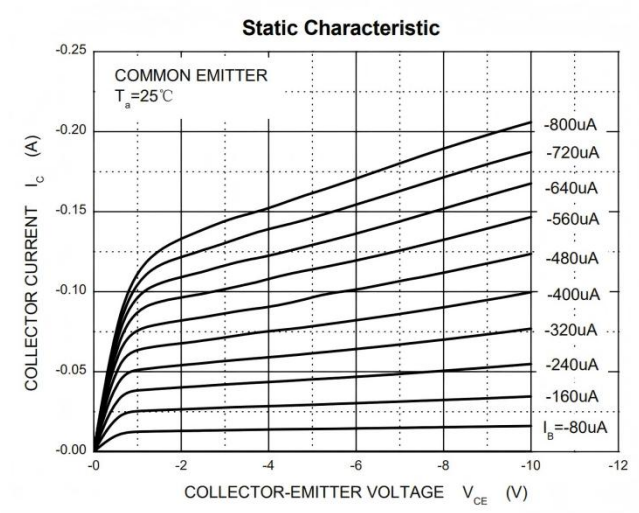
➢ Absolute Maximum Ratings(T_A=25℃ unless otherwise noted)

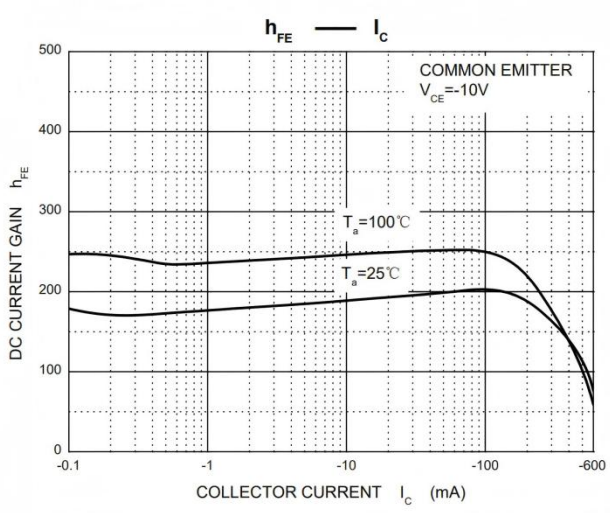
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-60	V
Collector- Emitter Voltage	V_{CEO}	-60	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current-Continuous	I_C	-600	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_J	-55 to 150	℃
Storage Temperature	T_{STG}	-55 to 150	℃

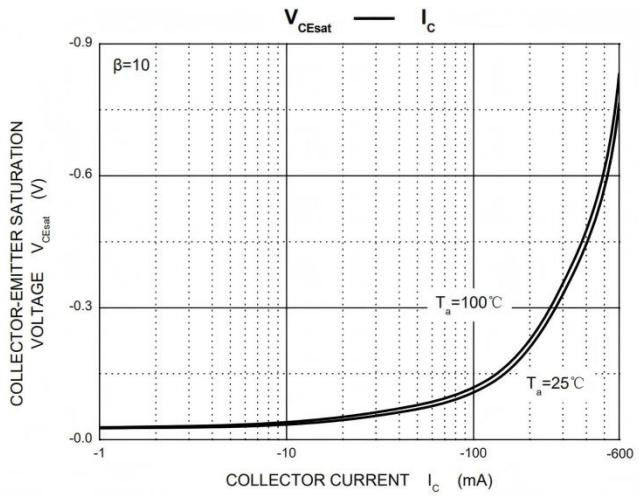
➢ Electrical Characteristics (T_A=25℃ unless otherwise noted)

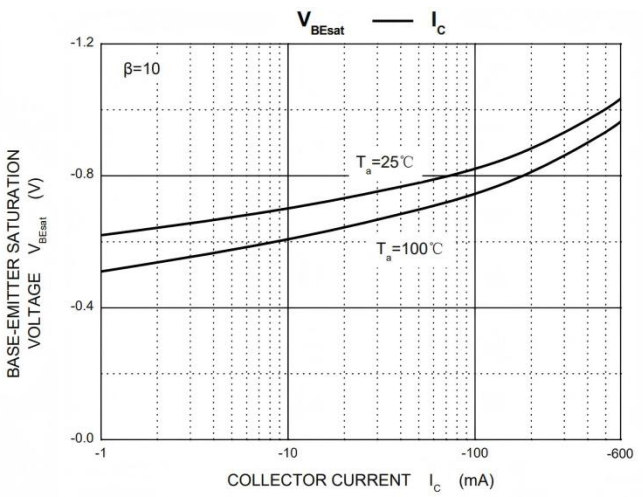
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C= -10uA, I_E=0	-60			V
Collector-emitter Breakdown Voltage	BV_{CEO}	I_C= -10mA, I_B=0	-60			V
Emitter -Base Breakdown Voltage	BV_{EBO}	I_E= -10uA, I_C=0	-5			V
Collector Cutoff Current	I_{CBO}	V_{CB}= -50V, I_E=0			-10	nA
Emitter Cutoff Current	I_{EBO}	V_{EB}= -3V, I_C=0			-10	nA
DC Current Gain	h_{FE1}	V_{CE}= -10V, I_C= -0.1mA	75			
	h_{FE2}	V_{CE}= -10V, I_C= -1mA	100			
	h_{FE3}	V_{CE}= -10V, I_C= -10mA	100			
	h_{FE4}	V_{CE}= -10V, I_C= -150mA	100		300	
	h_{FE5}	V_{CE}= -10V, I_C= -500mA	50			
Collector-Emitter Saturation Voltage	$V_{CE\ (sat)}$	I_C= -150mA, I_B= -15mA			-0.4	V
		I_C= -500mA, I_B= -50mA			-1.6	V
Base-Emitter Saturation Voltage	$V_{BE\ (sat)}$	I_C= -150mA, I_B= -15mA			-1.3	V
		I_C= -500mA, I_B=-50mA			-2.6	V
Transition frequency	f_T	V_{CE}= -20V, I_C=-50mA f=100MHz	200			MHz
Delay Time	t_d	V_{CC}= -30V, I_C=-150mA, I_{B1}=-15mA			10	ns
Rise Time	t_r	V_{CC}= -30V, I_C=-150mA, I_{B1}=-15mA			40	ns
Storage Time	t_s	V_{CC}= -6V, I_C=-150mA, I_{B1}= -I_{B2}= -15mA			225	ns
Fall Time	t_f	V_{CC}= -6V, I_C=-150mA, I_{B1}= -I_{B2}= -15mA			30	ns

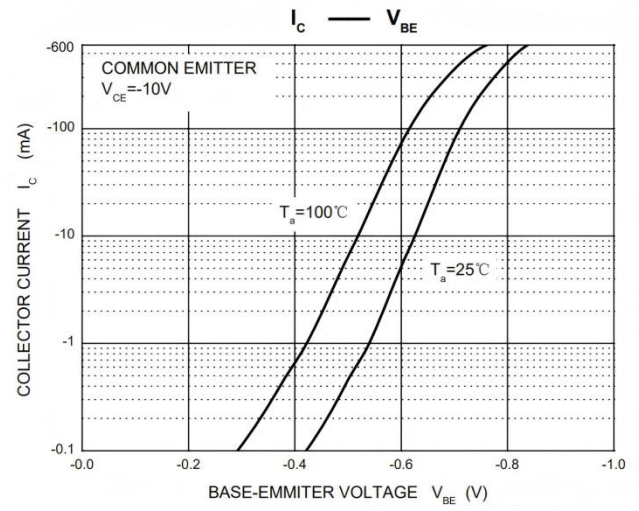
➢ Typical Performance Characteristics (T_A=25℃ unless otherwise noted)

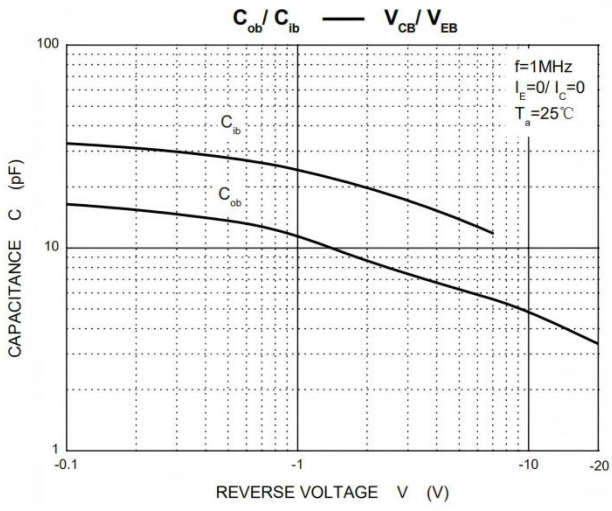


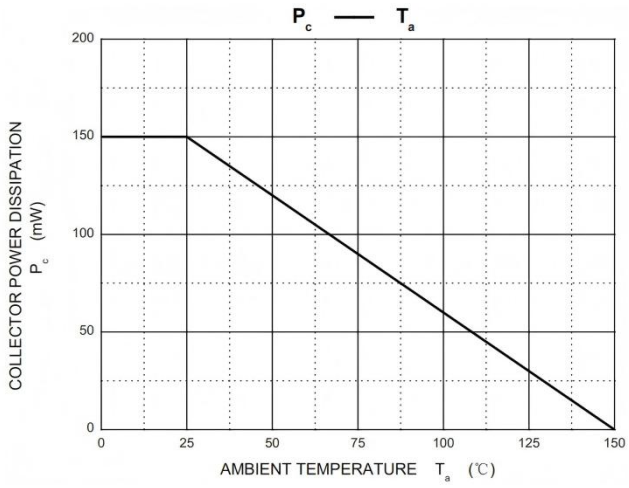




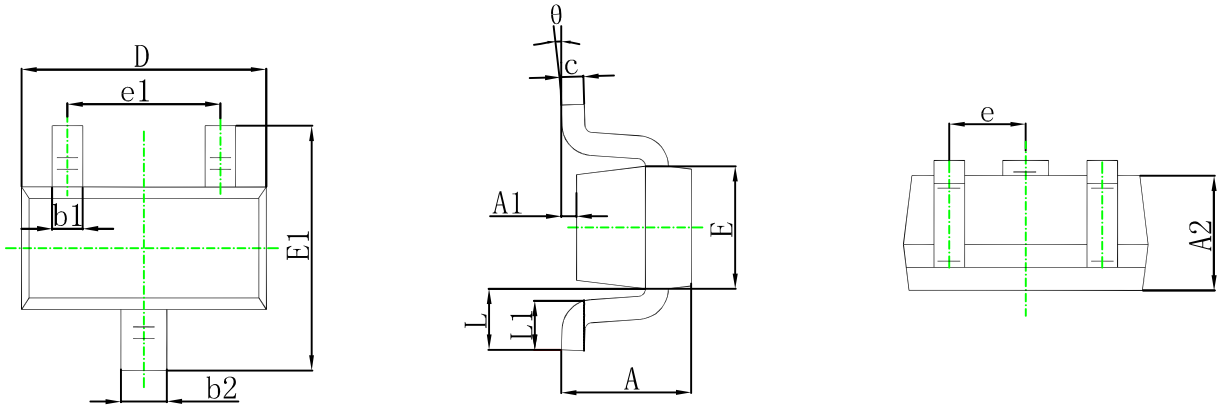






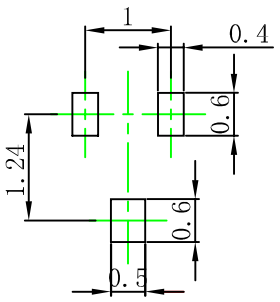


- **Package Information**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.700	0.900	0.028	0.035
A1	0.000	0.100	0.000	0.004
A2	0.700	0.800	0.028	0.031
b1	0.150	0.250	0.006	0.010
b2	0.250	0.350	0.010	0.014
c	0.100	0.200	0.004	0.008
D	1.500	1.700	0.059	0.067
E	0.700	0.900	0.028	0.035
E1	1.450	1.750	0.057	0.069
e	0.500 TYP.		0.020 TYP.	
e1	0.900	1.100	0.035	0.043
L	0.400 REF.		0.016 REF.	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Recommended Pad outline(Unit: mm)



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