



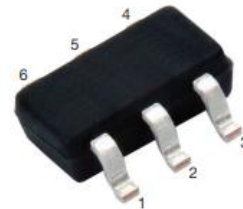
SSCP857GSG

High Frequency High Gain DUAL PNP Power BJT

➤ Features

VCB	VCE	VEB	IC
-50V	-45V	-5V	-200mA

➤ Pin configuration



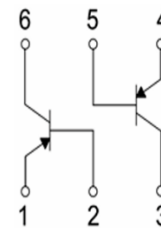
SOT-363

➤ 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.

➤ Applications

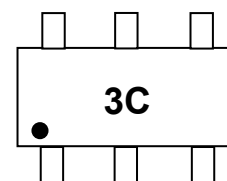
- General-purpose high-voltage amplifiers
- Gas discharge display drivers
- Medium power amplification and switching



Circuit Diagram

➤ Ordering Information

Device	Package	Shipping
SSCP857GSG	SOT-363	3000/Reel



Marking(Top View)

➤ **Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$ unless otherwise noted)**

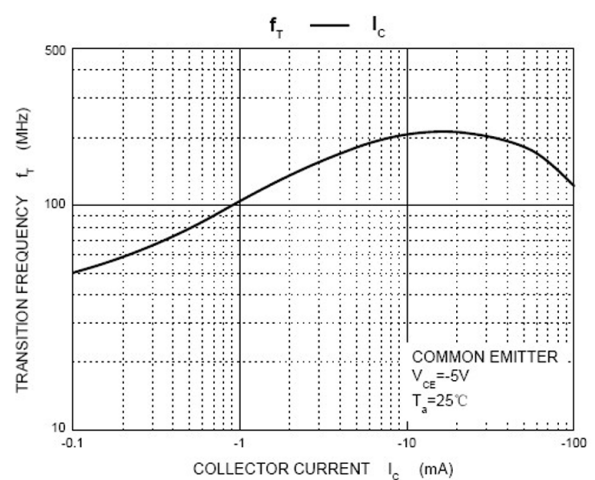
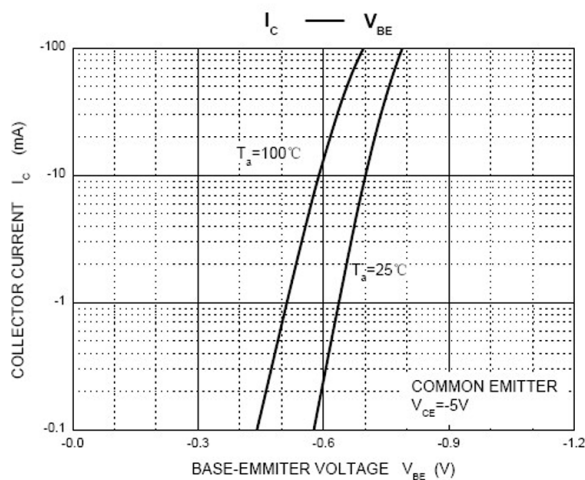
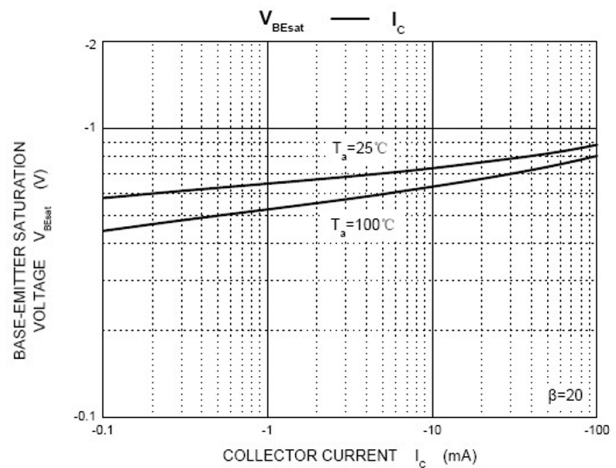
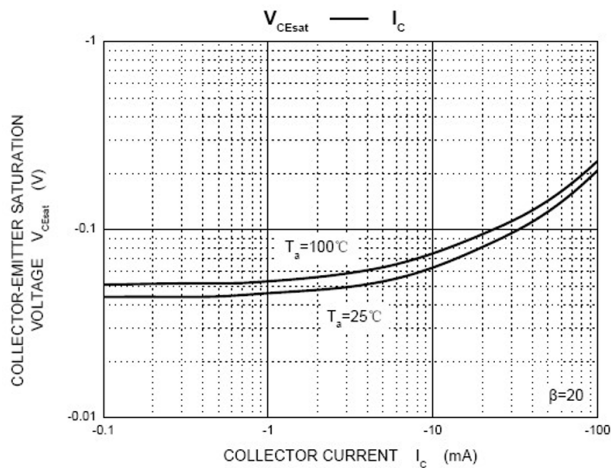
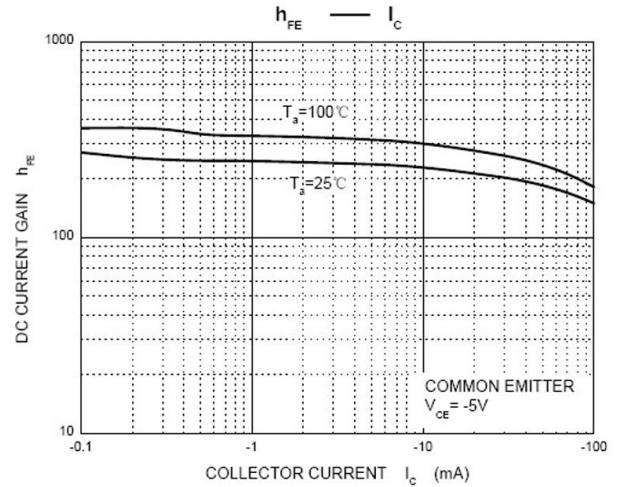
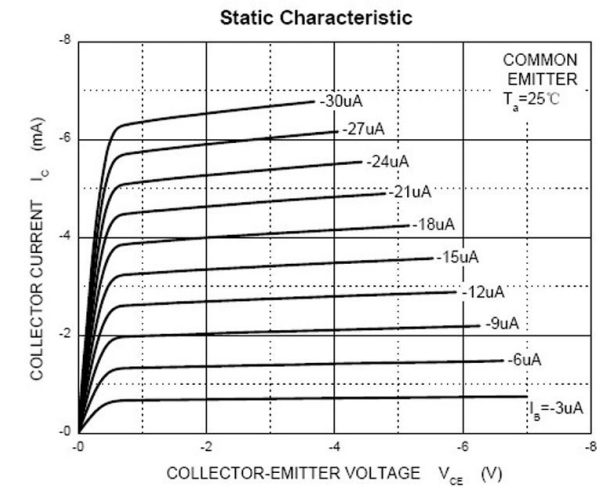
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-50	V
Collector- Emitter Voltage	V_{CEO}	-45	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current-Continuous	I_C	-200	mA
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_J	-55 to 150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 to 150	$^{\circ}\text{C}$
Thermal resistance From junction to ambient	$R_{\theta JA}$	417	$^{\circ}\text{C/W}$

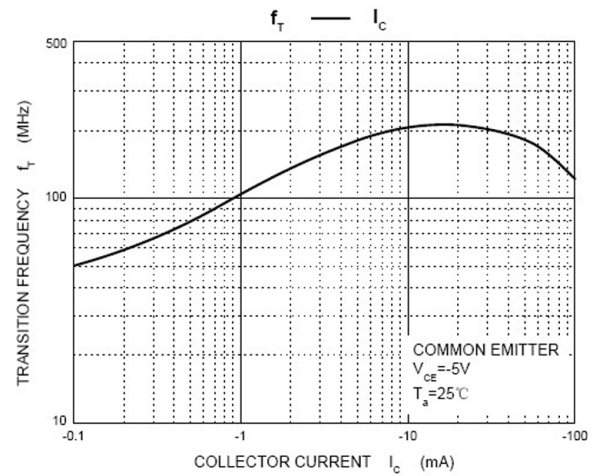
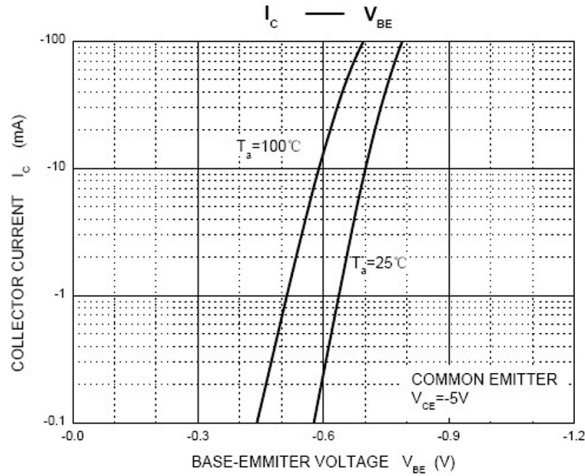
➤ **Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)**

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=-10\mu\text{A}$, $I_E=0$	-50			V
Collector-emitter Breakdown Voltage	BV_{CEO}	$I_C=-10\text{mA}$, $I_B=0$	-45			V
Emitter -Base Breakdown Voltage	BV_{EBO}	$I_E=-10\mu\text{A}$, $I_C=0$	-5			V
Collector Cutoff Current	I_{CBO}	$V_{CB}=-30\text{V}$, $I_E=0$			-15	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=-5\text{V}$, $I_C=0$			-100	nA
DC Current Gain	h_{FE}	$V_{CE}=-5\text{V}$, $I_C=-2\text{mA}$	125		630	
Collector-Emitter Saturation Voltage	$V_{CE(sat)1}$	$I_C=-10\text{mA}$, $I_B=-0.5\text{mA}$			-0.3	V
	$V_{CE(sat)2}$	$I_C=-100\text{mA}$, $I_B=-5\text{mA}$			-0.65	V
Base-Emitter Saturation Voltage	$V_{BE(sat)1}$	$V_{CE}=-5\text{V}$, $I_C=-2\text{mA}$	-0.6		-0.75	V
	$V_{BE(sat)2}$	$V_{CE}=-5\text{V}$, $I_C=-10\text{mA}$			-0.82	V
Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}$, $I_E=0$, $f=1\text{MHz}$		3.5		pF
Transition frequency	f_T	$V_{CE}=-5\text{V}$, $I_C=-10\text{mA}$, $f=100\text{MHz}$		200		MHz



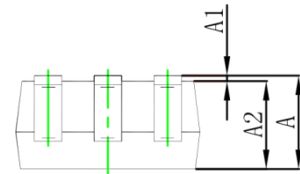
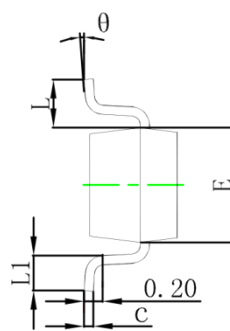
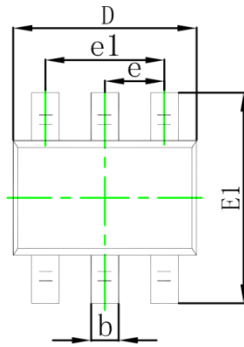
➤ Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)





➤ Package Information

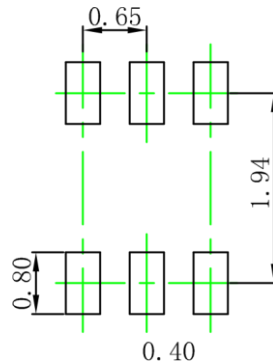
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Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	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
theta	0°	8°	0°	8°



➤ SOT-363 Suggested Pad Layout



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