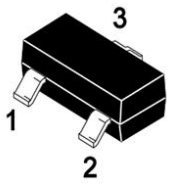
SSCN3356GS6

NPN Switching Transistor

➢ Features

VCB	VCE	VEB	IC
20V	12V	3V	0.1A

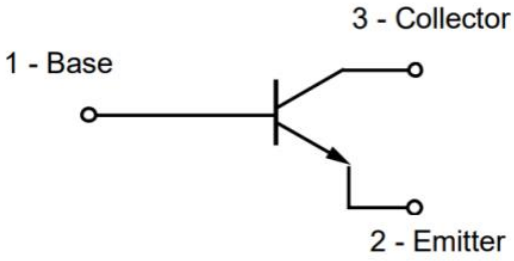
➢ Pin configuration



SOT-23

➢ Description

The NPN Transistor is designed for use in linear and switching applications. The device is housed in the SOT-23 package, which is designed for telephony and professional communication equipment.



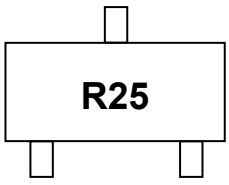
Circuit Diagram

➢ Applications

- General purpose switching and amplification
- Telephony and professional communication equipment

➢ Ordering Information

Device	Package	Shipping
SSCN3356GS6	SOT-23	3000/Reel



Marking(Top View)

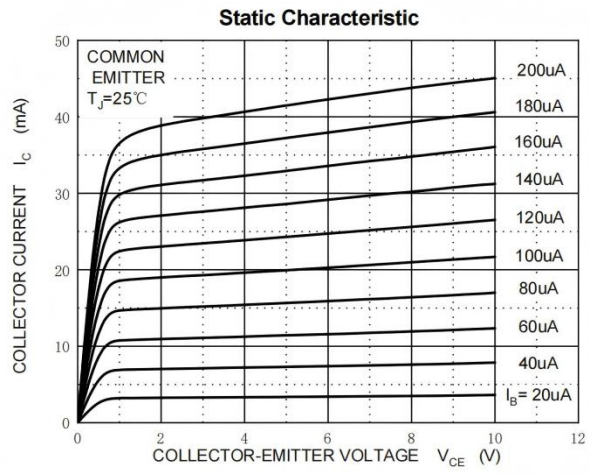
➢ Absolute Maximum Ratings(T_A = 25℃ unless otherwise noted)

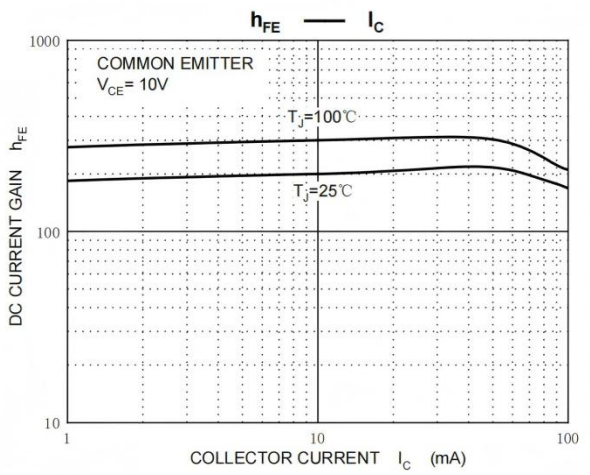
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	20	V
Collector- Emitter Voltage	V_{CEO}	12	V
Emitter-Base Voltage	V_{EBO}	3	V
Collector Current-Continuous	I_C	0.1	A
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_J	-55 to 150	℃
Storage Temperature	T_{STG}	-55 to 150	℃

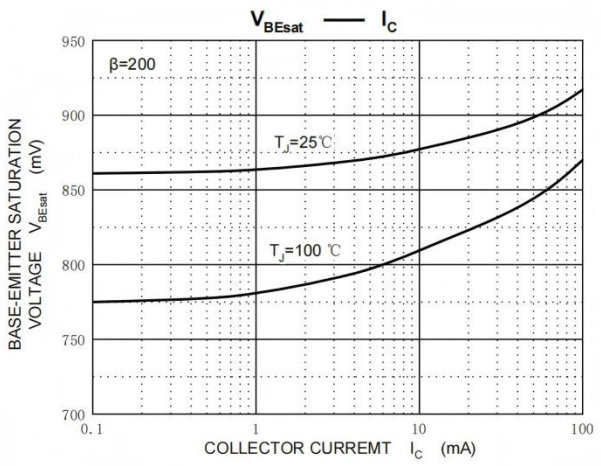
➢ Electrical Characteristics (T_A = 25℃ unless otherwise noted)

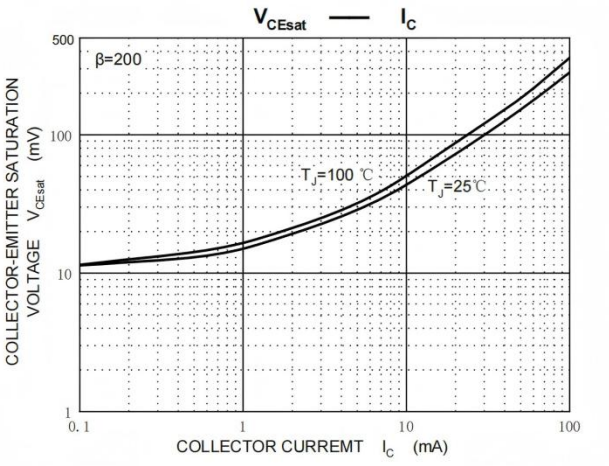
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C = 100uA, I_E = 0	20			V
Collector-emitter Breakdown Voltage	BV_{CEO}	I_C = 1mA, I_B = 0	12			V
Emitter -Base Breakdown Voltage	BV_{EBO}	I_E = 100uA, I_C = 0	3			V
Collector Cutoff Current	I_{CBO}	V_{CB} = 10V, I_E = 0			1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 1V, I_C = 0			1	μA
DC Current Gain	h_{FE}	V_{CE} = 10V, I_C = 20mA	125		250	
Collector-Emitter Saturation Voltage	$V_{CE\ (sat)}$	I_C = 50mA, I_B = 5mA			0.3	V
Base-Emitter Saturation Base-Emitter	$V_{BE\ (sat)}$	I_B = 50mA, I_C = 5mA			1.15	V
Transition frequency	f_T	V_{CE} = 10V, I_C = 20mA		7		GHz
Collector output capacitance	c_{ob}	V_{CB} = 10V f = 1MHz		0.8	1	pF

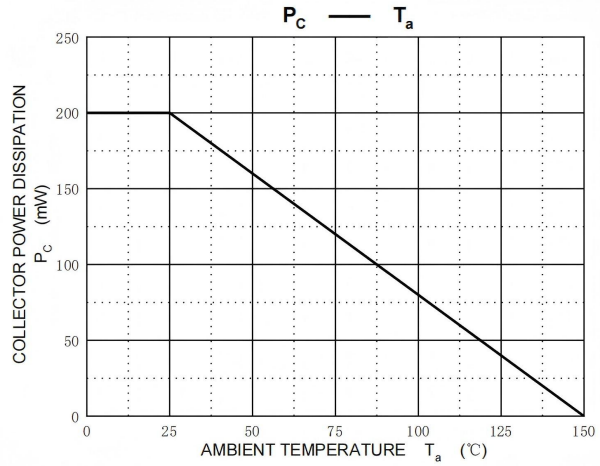
➢ Typical Performance Characteristics (T_A = 25℃ unless otherwise noted)

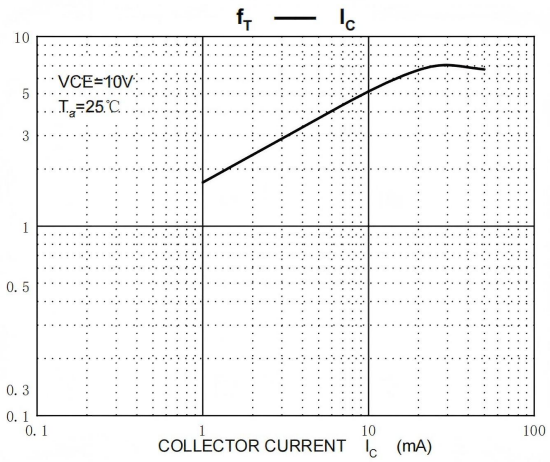






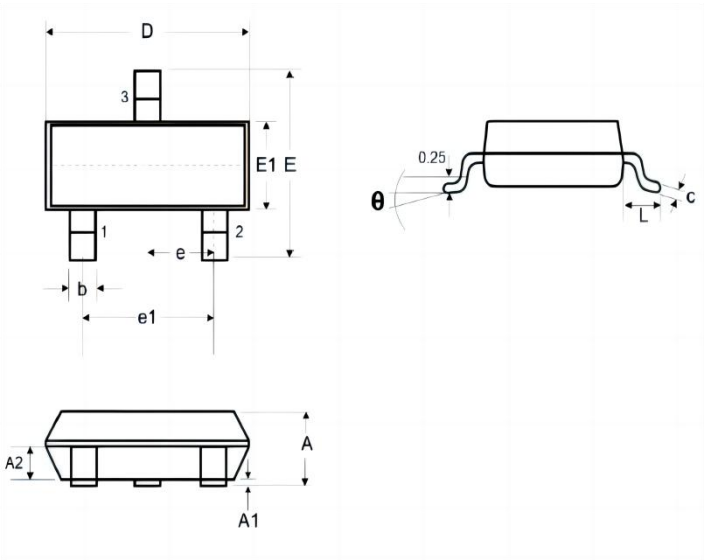






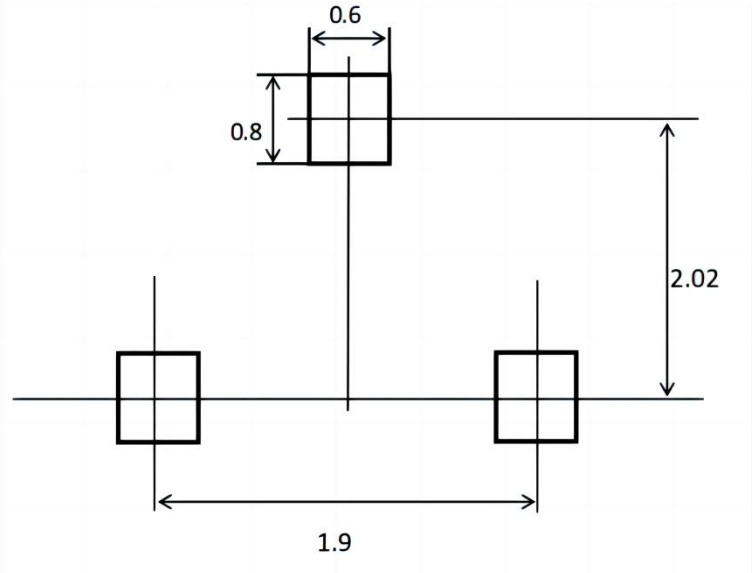
➢ Package Information

SOT-23



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	2.800	2.90	3.000
E	2.10	2.37	2.64
E1	1.20	1.30	1.40
e	0.95		
e1	1.80	-	2.00
L	0.40	0.50	0.60
L1	0.30		0.50
θ	0°	-	8°

Recommended Pad outline (Unit: mm)



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