SSCN2383GS3

NPN Switching Transistor

➢ Features

VCB	VCE	VEB	IC
160V	160V	6V	1.0A

➢ Description

The NPN Transistor is designed for use in linear and switching applications. The device is housed in the SOT89-3 package, which is designed for telephony and professional communication equipment.

➢ Applications

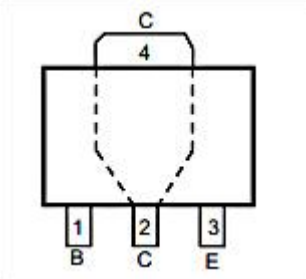
- General purpose switching and amplification
- Telephony and professional communication equipment

➢ Ordering Information

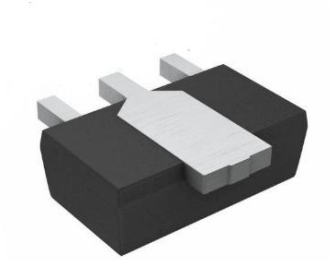
Device	Package	Shipping
SSCN2383GS3	SOT89-3L	1000/Reel

➢ Pin configuration

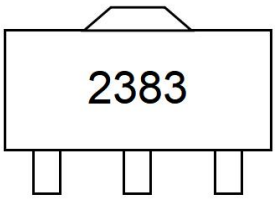
Top view



SOT89-3L



Bottom view



Marking(Top View)

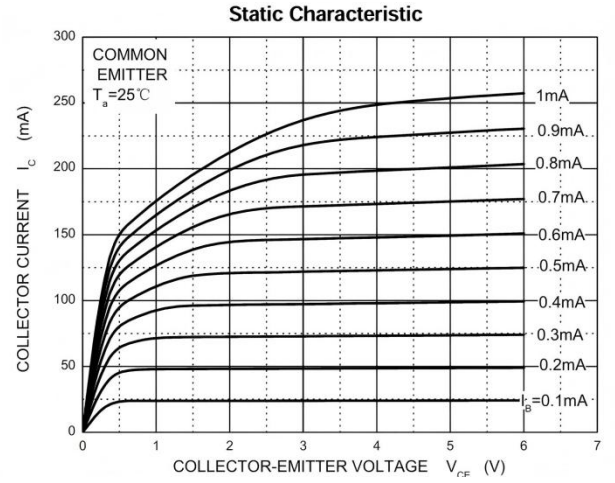
➢ Absolute Maximum Ratings(T_A = 25℃ unless otherwise noted)

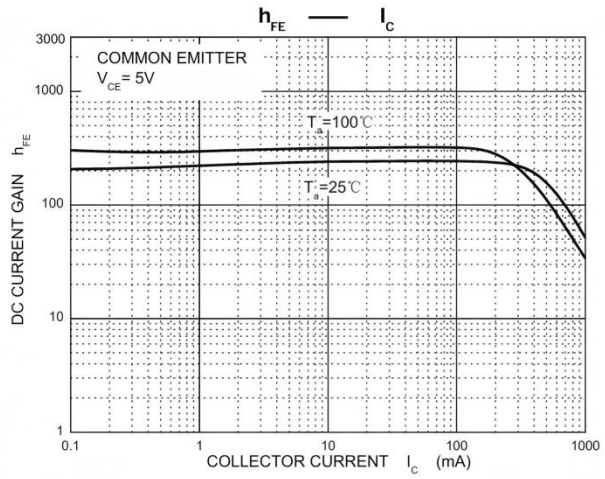
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	160	V
Collector- Emitter Voltage	V_{CEO}	160	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current-Continuous	I_C	1.0	A
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_J	-55 to 150	℃
Storage Temperature	T_{STG}	-55 to 150	℃

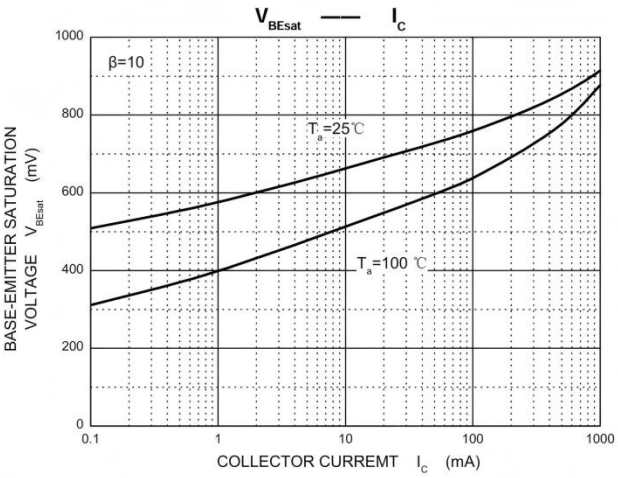
➢ Electrical Characteristics (T_A = 25℃ unless otherwise noted)

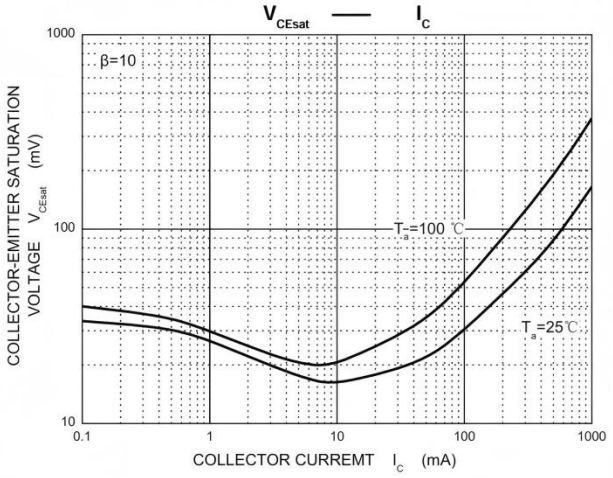
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C = 100uA, I_E = 0	160			V
Collector-emitter Breakdown Voltage	BV_{CEO}	I_C = 10mA, I_B = 0	160			V
Emitter -Base Breakdown Voltage	BV_{EBO}	I_E = 10uA, I_C = 0	6			V
Collector Cutoff Current	I_{CBO}	V_{CB} = 150V, I_E = 0			1.0	μA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 6V, I_C = 0			1.0	μA
DC Current Gain	h_{FE}	V_{CE} = 5V, I_C = 200mA	100		320	
Collector-Emitter Saturation Voltage	$V_{CE\ (sat)}$	I_C = 500mA,I_B = 50mA			1.0	V
Base-Emitter Voltage	V_{BE}	V_{CE} = 5V,I_C = 5mA	0.45		0.75	V
Transition frequency	f_T	V_{CE} = 5V, I_C = 200mA f = 200MHz	20			MHz
Collector output capacitance	c_{ob}	V_{CB} = 20V,I_E = 0, f = 1MHz		20		pF

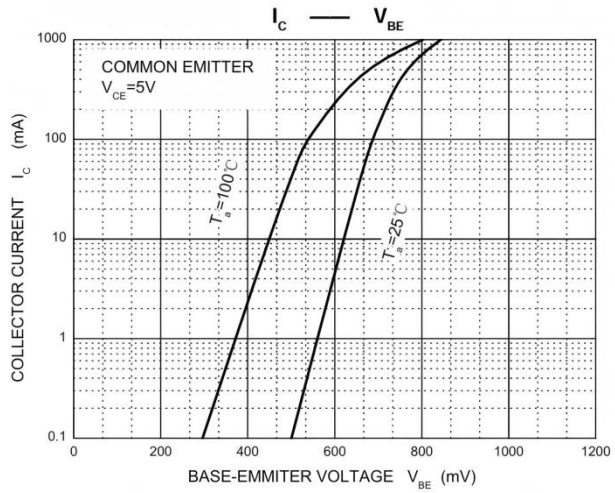
➢ Typical Performance Characteristics (T_A = 25℃ unless otherwise noted)

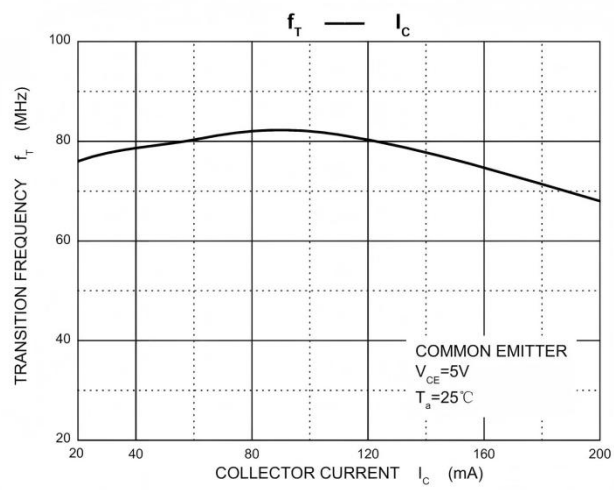


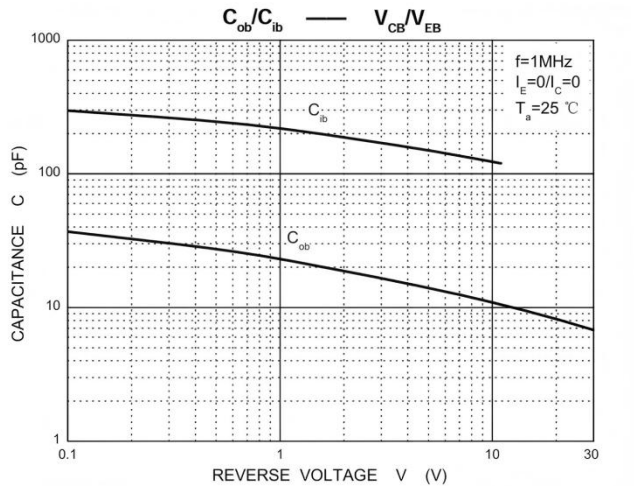


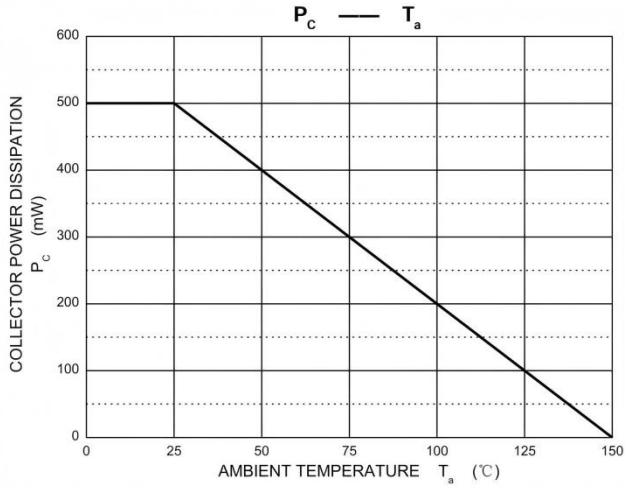






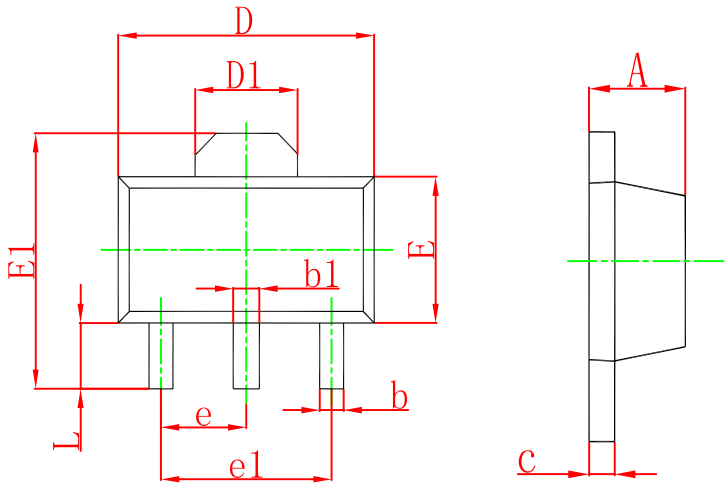






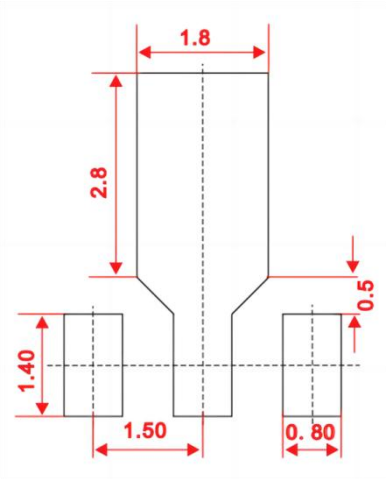
➢ Package Information

SOT89-3L



DIM	Millimeters		
	Min.	Typ.	Max.
A	1.400		1.600
b	0.320		0.520
b1	0.400		0.580
c	0.350		0.440
D	4.400		4.600
D1		1.550	
E	2.300		2.600
E1	3.940		4.250
e		1.500	
e1		3.000	
L	0.900		1.200

Recommended Pad outline (Unit: mm)



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