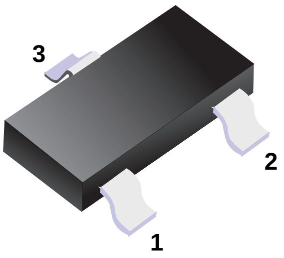
PNP Transistors

Pb ROHS lead-free



1.Base
2.Emitter
3.Collector

Simplified outline(SOT-23)

Features

- Collector Current: I_C=-1.5A

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-25	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current -Continuous	I_C	-1.5	A
Collector Power Dissipation	P_C	0.3	W
Junction Temperature	T_j	150	℃
Storage Temperature	T_{stg}	-55 to 150	℃

Electrical Characteristics Ta = 25℃

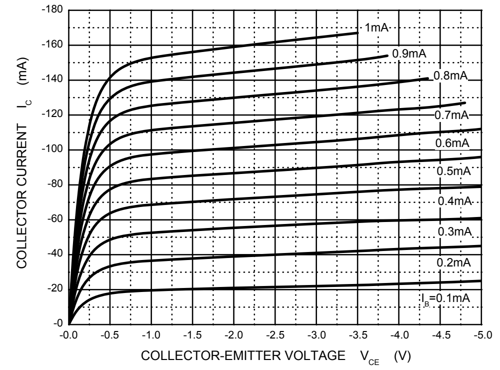
Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	I_C=-100 μ A, I_E=0	-40			V
Collector-emitter breakdown voltage	V_{CEO}	I_C=-1mA, I_B=0	-25			V
Emitter-base breakdown voltage	V_{EBO}	I_E=-100 μ A, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-40V, I_E=0			-0.1	μ A
Collector cut-off current	I_{CEO}	V_{CE}=-20V, I_B=0			-1	μ A
Emitter cut-off current	I_{EBO}	V_{EB}=-5V, I_C=0			-0.1	μ A
DC current gain	h_{FE}	V_{CE}=-1V, I_C=-100mA	120		400	
		V_{CE}=-1V, I_C=-800mA	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-800mA, I_B=-80mA			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=-800mA, I_B=-80mA			-1.2	V
Base-emitter on voltage	$V_{BE(on)}$	I_C=-1V,V_{CE}=-10mA			-1	V
output capacitance	C_{ob}	V_{CB}=-10V,I_E=0,f=1MHz			20	pF
Transition frequency	f_T	V_{CE}= -10V, I_C= -50mA,f=30MHz	100			MHz

h_{FE}(1) Classification

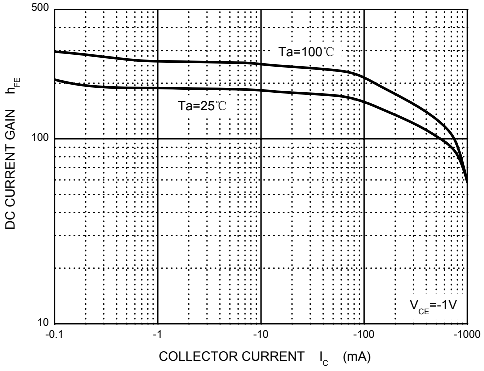
Type	SS8550	SS8550-L	SS8550-H	SS8550-J
Range	200-350	120-200	144-202	300-400
Marking	Y2			

■Typical Characteristics

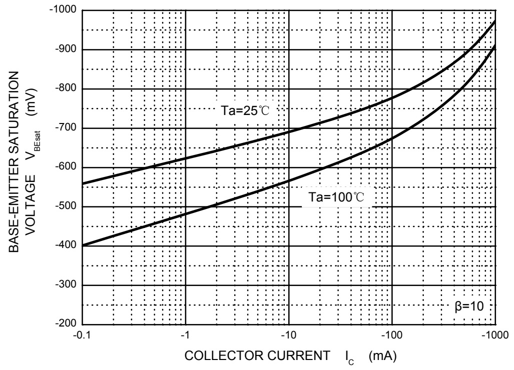
Static Characteristic



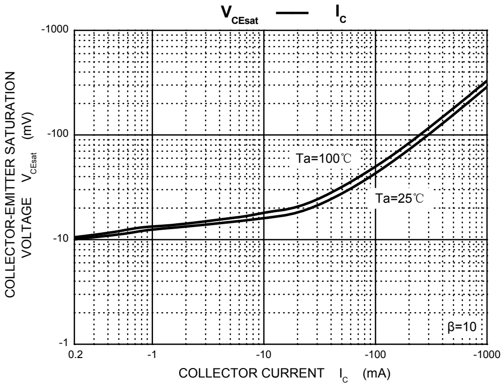
h_{FE} —— I_C



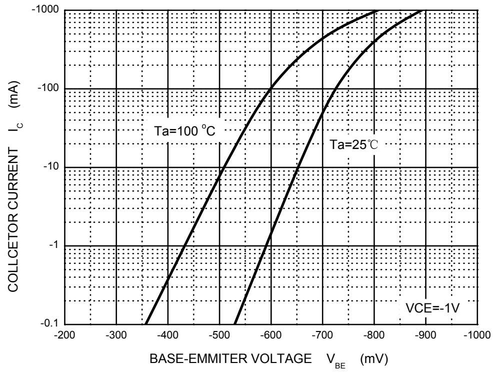
V_{BEsat} —— I_C



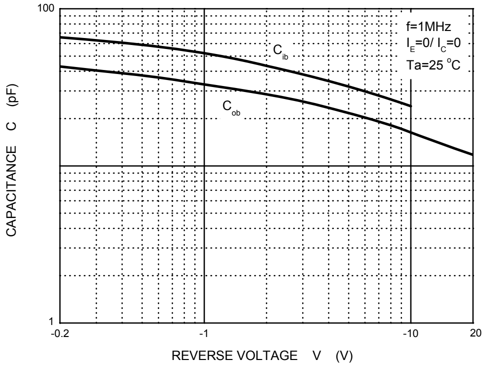
V_{CEsat} —— I_C



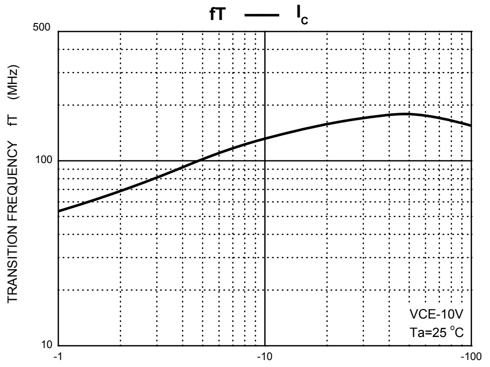
V_{BE} —— I_C



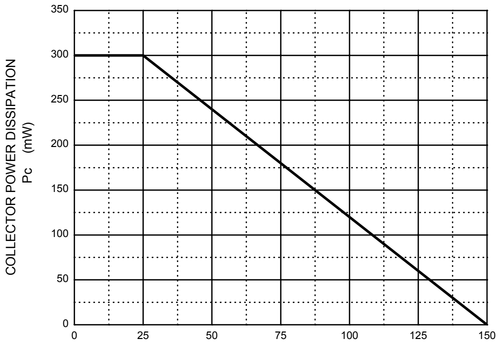
C_{ob}/ C_{ib} —— V_{CB}/ V_{EB}



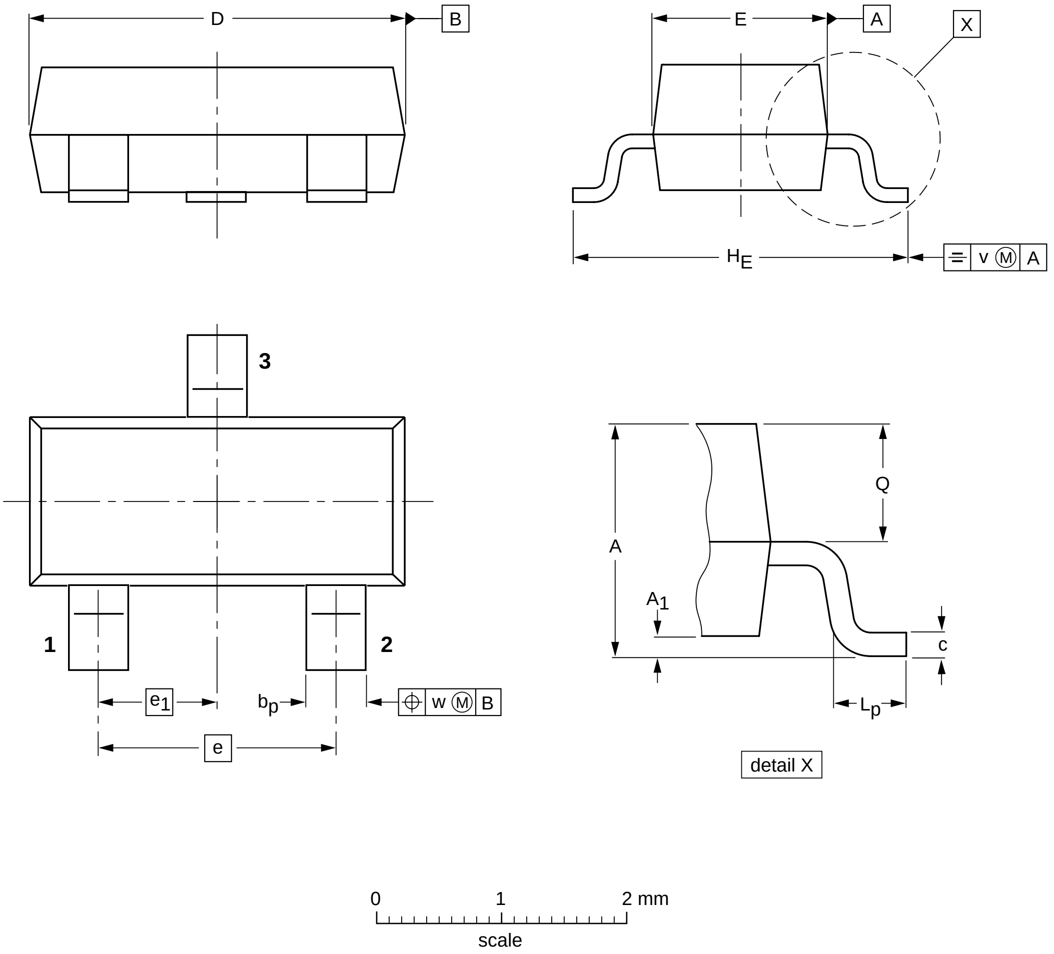
fT —— I_C



Pc —— Ta



Package Outline SOT-23



DIMENSIONS (mm are the original dimensions)

UNIT	A	A_1 max.	b_p	c	D	E	e	e_1	H_E	L_p	Q	v	w
mm	1.1 0.9	0.1	0.48 0.38	0.15 0.09	3.0 2.8	1.4 1.2	1.9	0.95	2.5 2.1	0.45 0.15	0.55 0.45	0.2	0.1

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOT-23	Tape/Reel,7”reel	3000	EIA-481-1