

SS8550 Transistor(PNP)

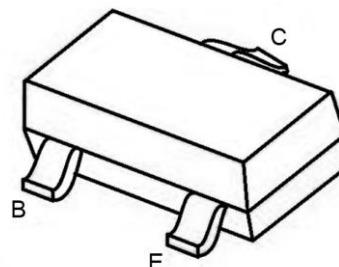
Feature

- PNP epitaxial silicon , planar design
- Collector-emitter voltage $V_{CE}=-25V$
- Collector current $I_C=-1.5A$
- In compliance with SS8050

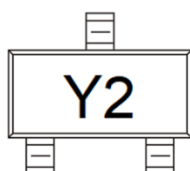
MAXIMUM RATINGS ($T_a=25^{\circ}C$ unless otherwise noted)

Parameter	Symbol	Value	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
Power Dissipation	P_d	0.2	W
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature	T_{STG}	-55~ +150	$^{\circ}C$

SOT-323



MARKING:



Classification of hfe:

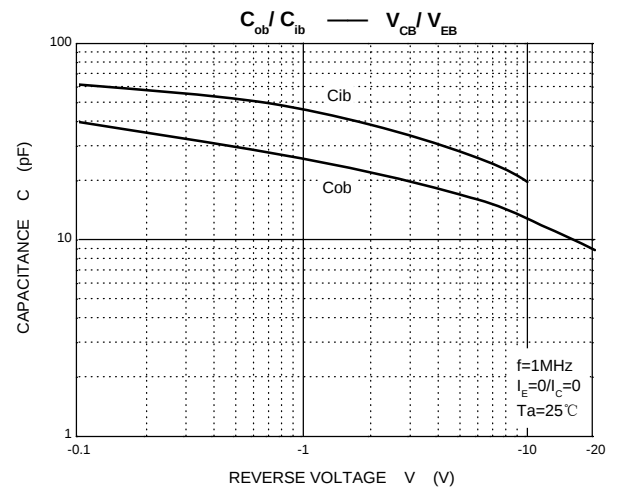
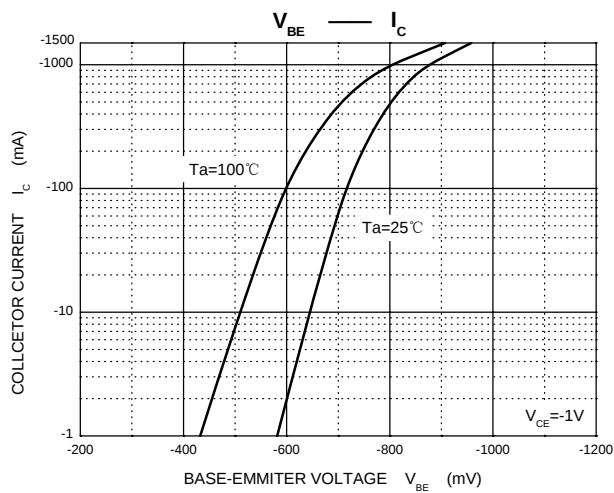
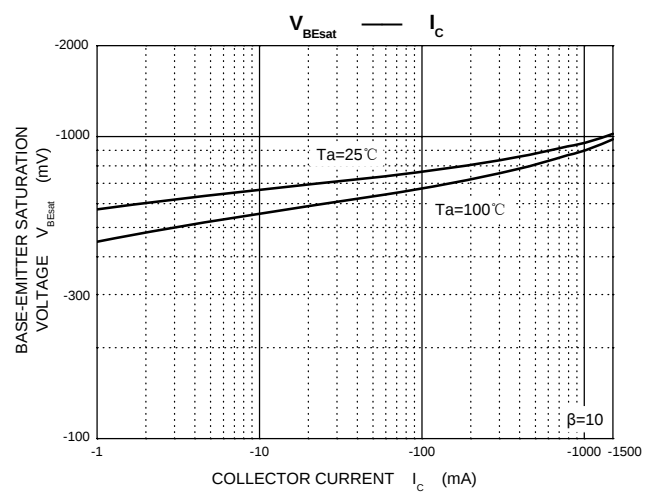
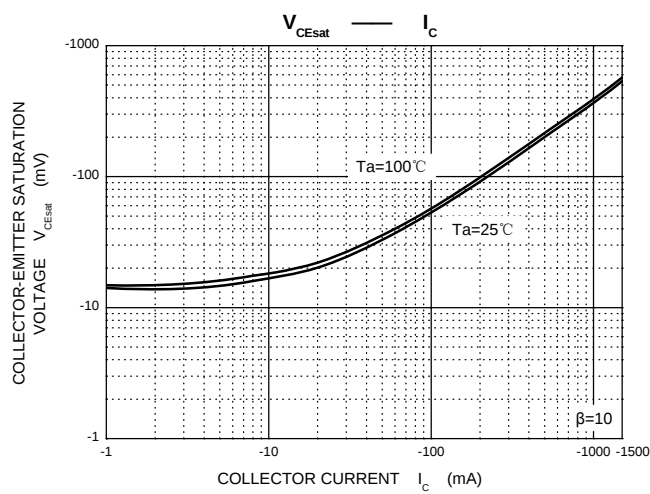
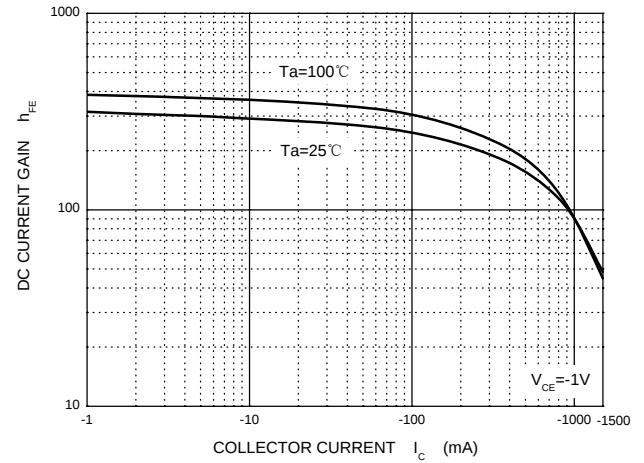
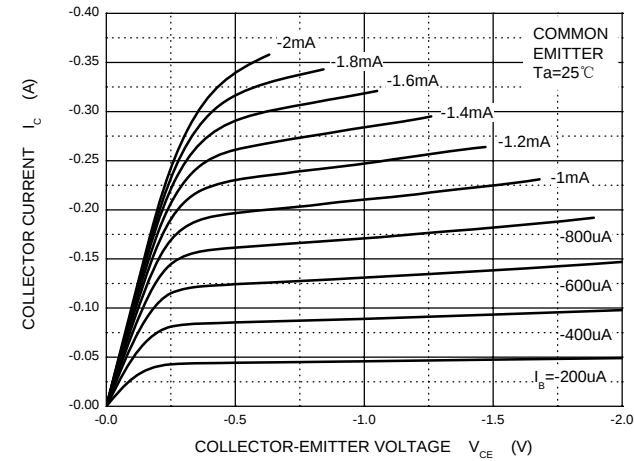
RANK	L	H	J
RANGE	120~200	200~350	350~400

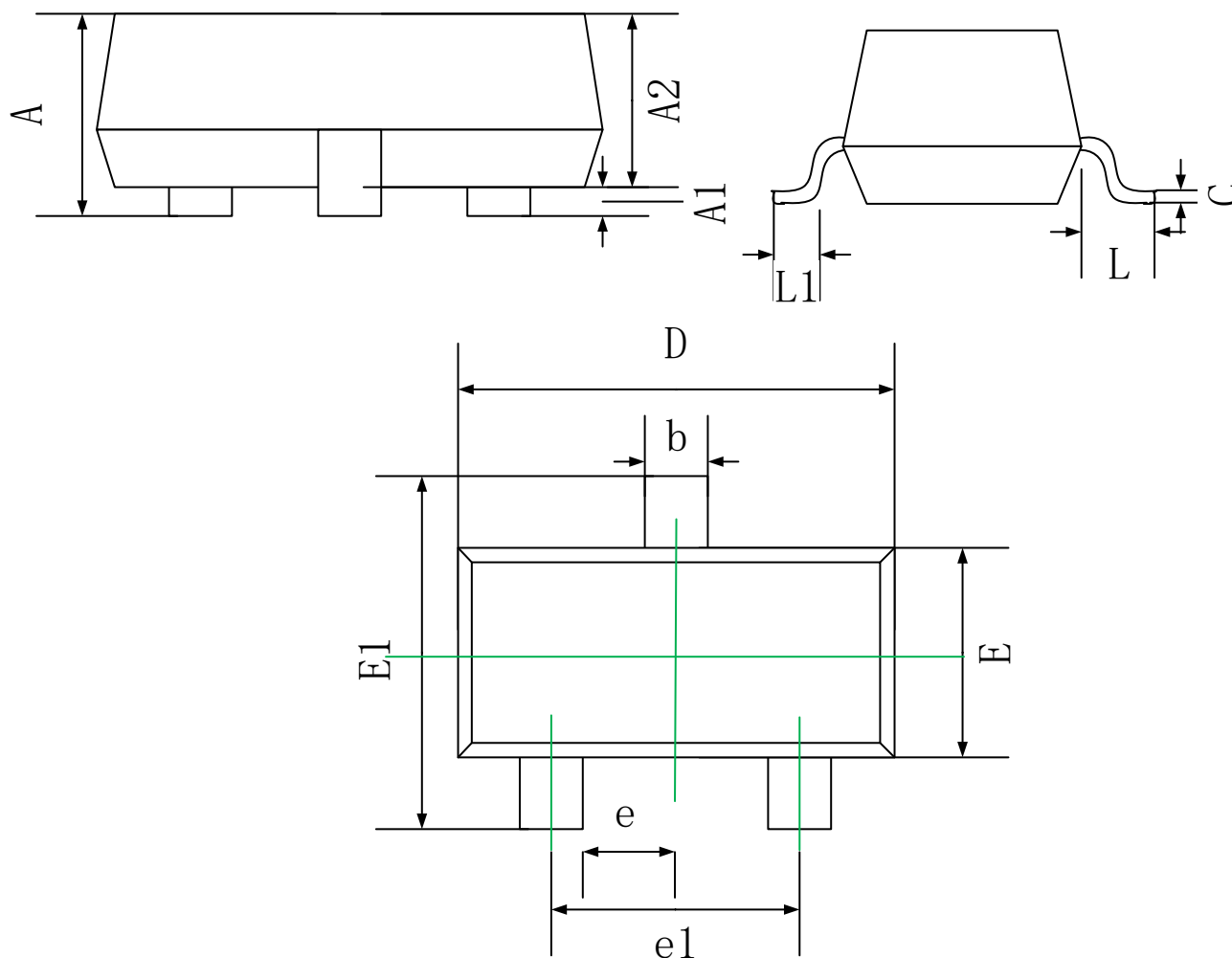
ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-base breakdown voltage	$V(\text{BR})_{\text{CBO}}$	$I_C=-100\mu\text{A}, I_E=0$	-40		V
Collector-emitter breakdown voltage	$V(\text{BR})_{\text{CEO}}$	$I_C=-1\text{mA}, I_B=0$	-25		V
Emitter-base breakdown voltage	$V(\text{BR})_{\text{EBO}}$	$I_E=-100\mu\text{A}, I_C=0$	-5		V
Collector cut-off current	I_{CBO}	$V_{\text{CB}}=-40\text{V}, I_E=0$		-100	nA
Collector cut-off current	I_{CEO}	$V_{\text{CE}}=-20\text{V}, I_B=0$		-100	nA
Emitter cut-off current	I_{EBO}	$V_{\text{EB}}=-5\text{V}, I_C=0$		-100	nA
DC current gain	h_{FE}	$V_{\text{CE}}=-1\text{V}, I_C=-0.1\text{mA}$	40		
	h_{FE}	$V_{\text{CE}}=-1\text{V}, I_C=-1\text{mA}$	70		
	h_{FE}	$V_{\text{CE}}=-1\text{V}, I_C=-100\text{mA}$	100	400	
	h_{FE}	$V_{\text{CE}}=-1\text{V}, I_C=-400\text{mA}$	60		
	h_{FE}	$V_{\text{CE}}=-1\text{V}, I_C=-800\text{mA}$	30		
Collector-emitter saturation voltage	$V_{\text{CE(sat)}}$	$I_C=-100\text{mA}, I_B=-10\text{mA}$		-0.5	V
		$I_C=-800\text{mA}, I_B=-80\text{mA}$		-0.6	V
Base-emitter saturation voltage	$V_{\text{BE(sat)}}$	$I_C=-100\text{mA}, I_B=-10\text{mA}$		-1.1	V
		$I_C=-800\text{mA}, I_B=-80\text{mA}$		-1.2	V
Transition frequency	f_T	$V_{\text{CE}}=-10\text{V}, I_C=-50\text{mA}, f=30\text{MHz}$	100		MHZ
Input capacitance	C_{IB}	$V_{\text{CB}}=-5\text{V}, I_E=0, f=1\text{MHz}$		4	pF
Output capacitance	C_{OB}	$V_{\text{EB}}=-0.5\text{V}, I_C=0, f=1\text{MHz}$		8	pF
Delay time	t_d	$V_{\text{CC}}=-3\text{V}, V_{\text{BE}}=0.5\text{V},$		35	nS
Rise time	t_r	$I_C=-10\text{mA}, I_B=-1\text{mA}$		35	nS
Storage time	t_s	$V_{\text{CC}}=-3\text{V}, V_{\text{BE}}=0.5\text{V},$		200	nS
Fall time	t_f	$I_{\text{B1}}=I_{\text{B2}}=-1\text{mA}$		50	nS

*Pulse Test: Pulse Width<300uS , Duty Cycle<2.0%

Typical Characteristics



SOT-323 Package Information


Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.90	1.15
A1	0.00	0.10
A2	0.90	1.05
b	0.20	0.40
c	0.08	0.15
D	2.00	2.20
E	1.15	1.35
E1	2.15	2.45
e	0.65 TYP.	
e1	1.20	1.40
L	0.525 REF.	
L1	0.26	0.46