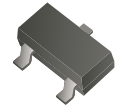


SS8550-L-HF Thru. SS8550-H-HF (PNP)

RoHS Device
Halogen Free



Features

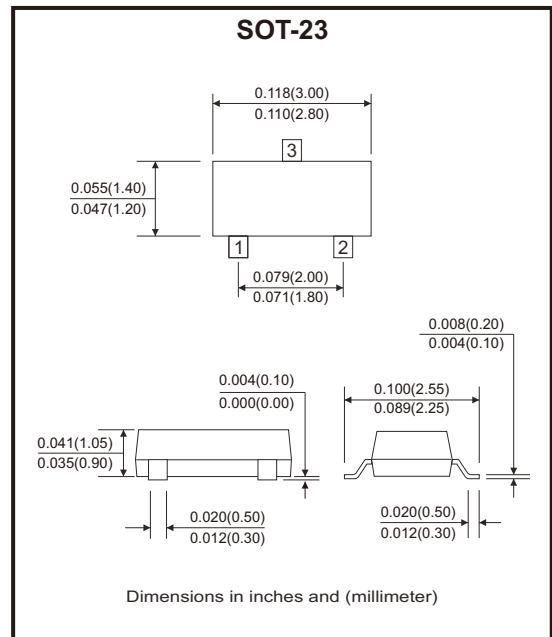
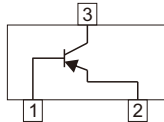
- Epoxy meets UL-94 V-0 flammability rating.
- Moisture sensitivity Level 1.
- Surface mount package ideally suited for automatic insertion.

Mechanical data

- Case: SOT-23, molded plastic.
- Mounting position: Any.

Circuit Diagram

1. Base
2. Emitter
3. Collector



Maximum Ratings (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Value	Unit
Collector-emitter voltage	$I_C = -100\mu\text{A}$, $I_B = 0$	V_{CE0}	-25	V
Collector-base voltage	$I_C = -100\mu\text{A}$, $I_E = 0$	V_{CB0}	-40	V
Emitter-base voltage	$I_E = -100\mu\text{A}$, $I_C = 0$	V_{EB0}	-5	V
Collector current		I_C	-1.5	A
Collector-emitter cut-off current	$V_{CE} = -20\text{Vdc}$	I_{CE0}	-100	nAdc
Collector-base cut-off current	$V_{CB} = -40\text{Vdc}$	I_{CB0}	-100	
Emitter-base cut-off current	$V_{EB} = -5\text{Vdc}$	I_{EB0}	-100	
Collector power dissipation		P_C	300	mW
Operation junction temperature range		T_J	-55 to +150	°C
Storage temperature range		T_{STG}	-55 to +150	°C

Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min	Max	Unit
On characteristics					
DC current gain	$h_{FE(1)}$	$I_C = -100mA, V_{CE} = -1V_{dc}$	120	350	
	$h_{FE(2)}$	$I_C = -800mA, V_{CE} = -1V_{dc}$	40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -800mA, I_B = -80mA$		-0.5	Vdc
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -800mA, I_B = -80mA$		-1.2	Vdc
Small-signal characteristics					
Transition frequency	f_r	$I_C = -50mA, V_{CE} = -10V_{dc}, f = 30MHz$	100		MHz

Classification of h_{FE} (1)

Rank	SS8550-L-HF	SS8550-H-HF
Range	120-200	200-350

Rating and Characteristic Curves (SS8550-L-HF Thru. SS8550-H-HF)

Fig.1 - Static Characteristic

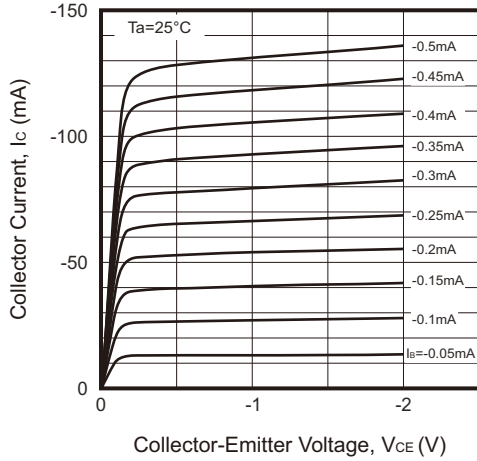


Fig.2 - DC Current Gain

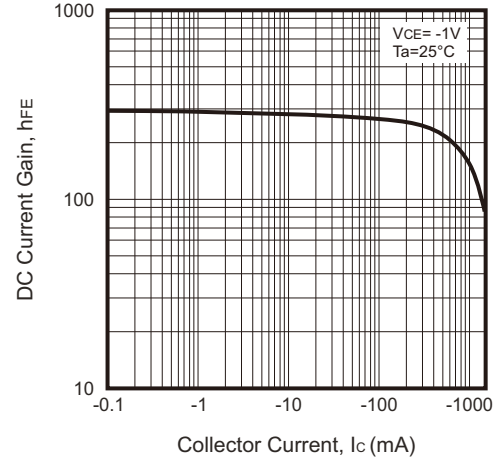


Fig.3 - Collector-Emitter Saturation Voltage

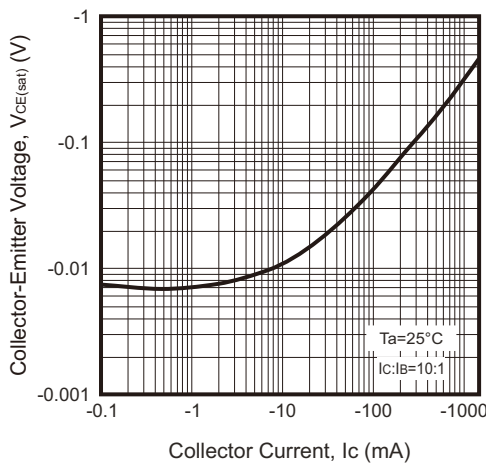


Fig.4 - Base-Emitter Saturation Voltage

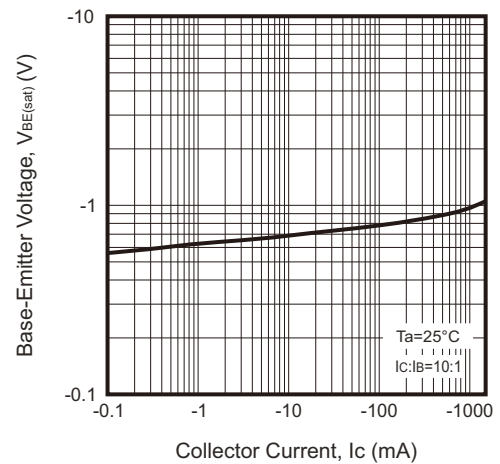


Fig.5 - Base-Emitter On Voltage

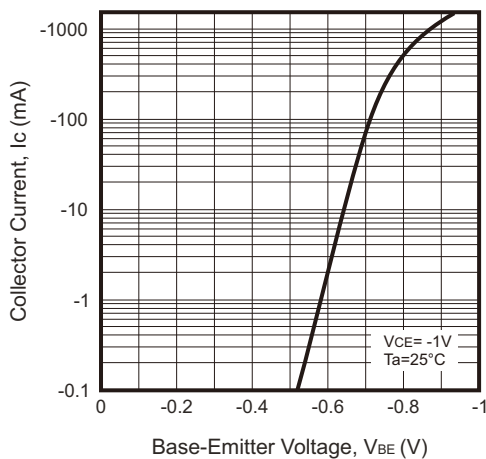
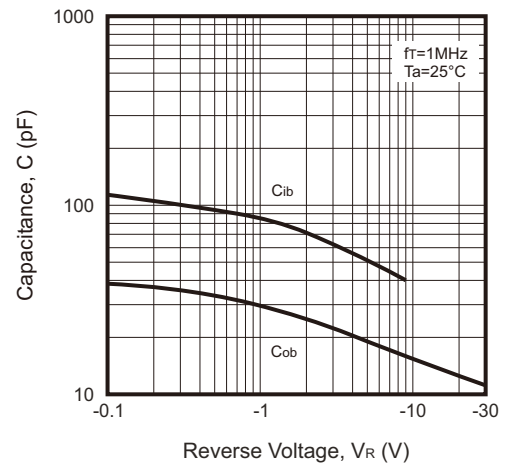
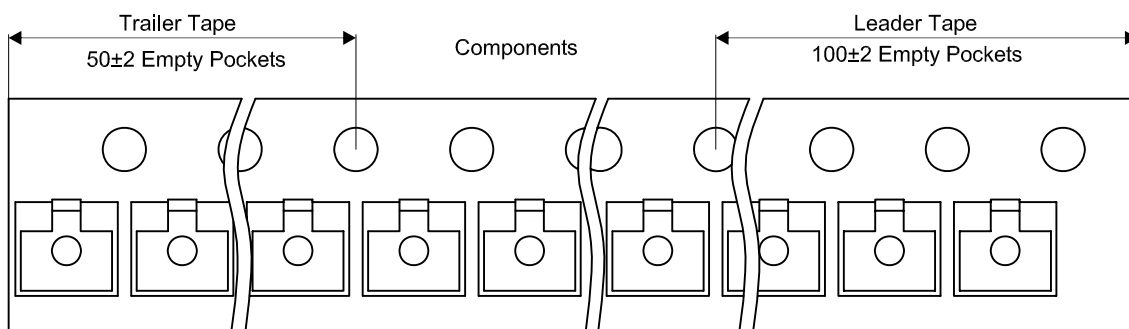
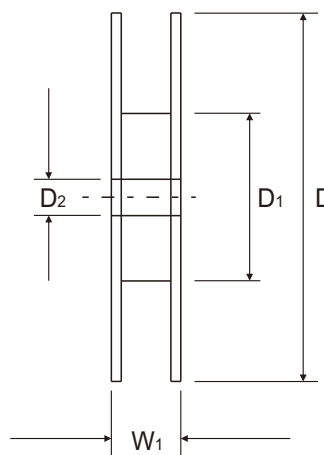
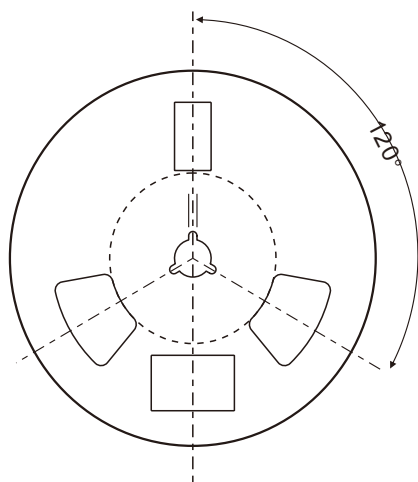
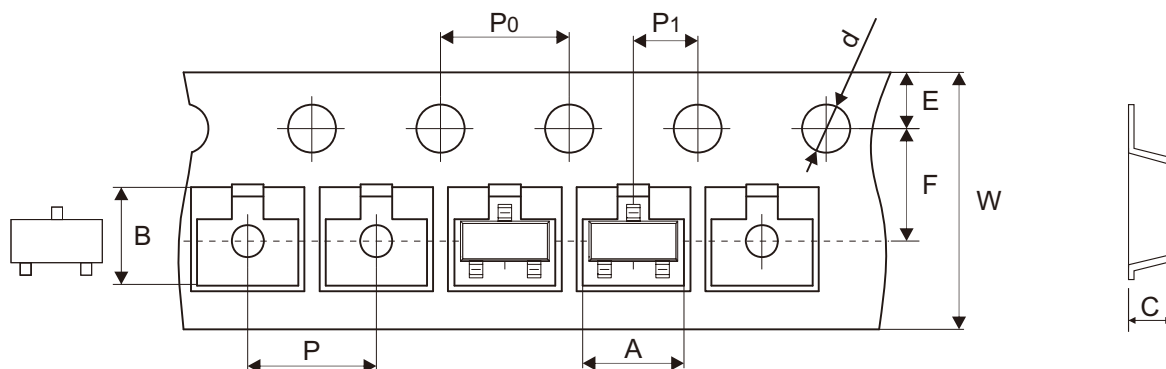


Fig.6 - $C_{ob}/C_{ib} - V_{CB}/V_{EB}$



Reel Taping Specification

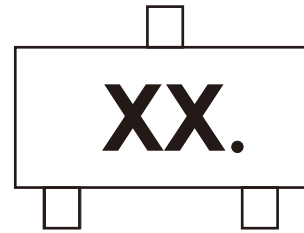


SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	$1.50 + 0.10$ $- 0.00$	178.00 ± 1.00	54.60 ± 1.00	13.30 ± 1.00
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	$0.059 + 0.004$ $- 0.000$	7.008 ± 0.039	2.150 ± 0.039	0.524 ± 0.039

SOT-23	SYMBOL	E	F	P	P_0	P_1	W	W_1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	$8.00 + 0.30$ $- 0.10$	11.10 ± 0.20
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	$0.315 + 0.012$ $- 0.004$	0.437 ± 0.008

Marking Code

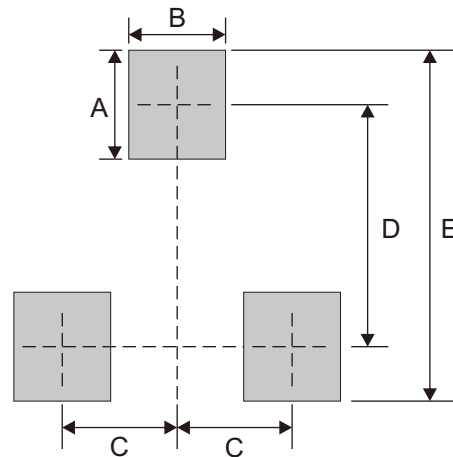
Part Number	Marking Code
SS8550-L-HF	Y2·L
SS8550-H-HF	Y2



xx/xxxx = Product type marking code

Suggested P.C.B. PAD Layout

SIZE	SOT-23	
	(mm)	(inch)
A	0.90	0.035
B	0.80	0.031
C	0.95	0.037
D	2.00	0.079
E	2.90	0.114



Note: 1. The pad layout is for reference purposes only.

Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-23	3,000	7