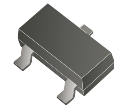


ASS8550-L-HF Thru. ASS8550-H-HF (PNP)

RoHS Device

Halogen Free

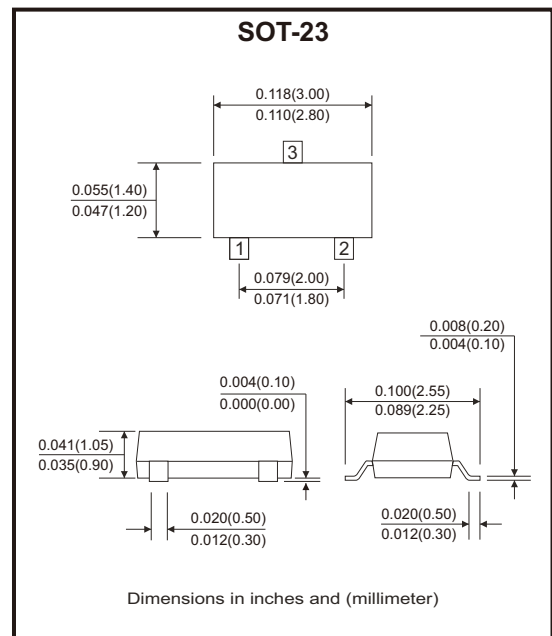


Features

- Epoxy meets UL-94 V-0 flammability rating.
- Moisture sensitivity Level 1.
- AEC-Q101 Qualified.

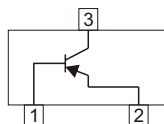
Mechanical data

- Case: SOT-23, molded plastic.
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102.



Circuit Diagram

1. Base
2. Emitter
3. Collector



Maximum Ratings (at $T_A=25^{\circ}\text{C}$ 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
Total device dissipation	P_D	300	mW
Junction temperature	T_J	150	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}, I_E = 0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -100\mu\text{A}, I_B = 0$	-25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu\text{A}, I_C = 0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB} = -40\text{V}, I_E = 0$		-100	nA
Collector cut-off current	I_{CEO}	$V_{CE} = -20\text{V}, I_B = 0$		-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$		-100	nA
DC current gain	$h_{FE(1)}$	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$	120	350	
	$h_{FE(2)}$	$V_{CE} = -1\text{V}, I_C = -800\text{mA}$	40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -800\text{mA}, I_B = -80\text{mA}$		-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -800\text{mA}, I_B = -80\text{mA}$		-1.2	V
Small-signal characteristics					
Transition frequency	f_T	$V_{CE} = -10\text{Vdc}, I_C = -50\text{mA}, f = 30\text{MHz}$	100		MHz

Classification of h_{FE} (1)

Rank	ASS8550-L-HF	ASS8550-H-HF
Range	120-200	200-350

Rating and Characteristic Curves (ASS8550-L-HF Thru. ASS8550-H-HF)

Fig.1 - Static Characteristic

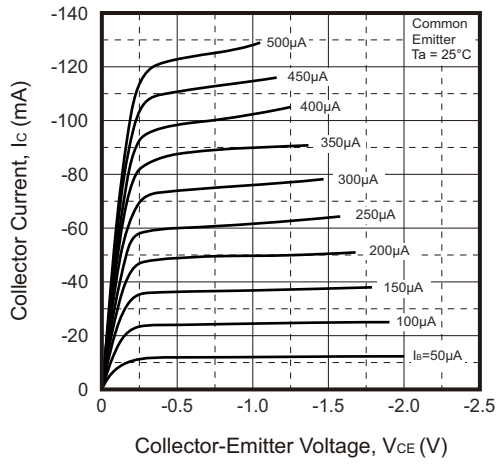


Fig.2 - DC Current Gain

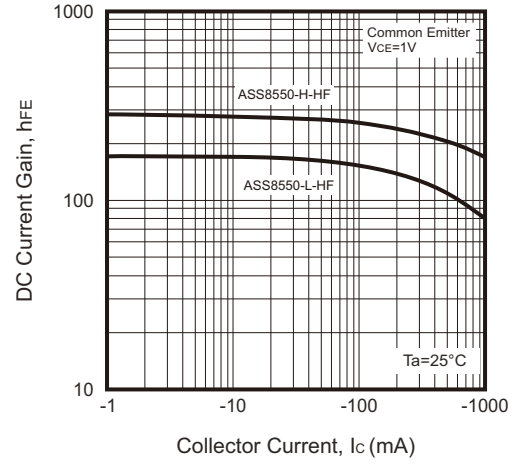


Fig.3 - Base-Emitter Saturation Voltage vs. Collector Current

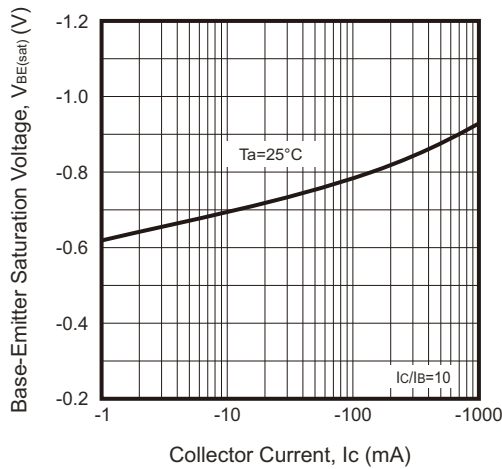
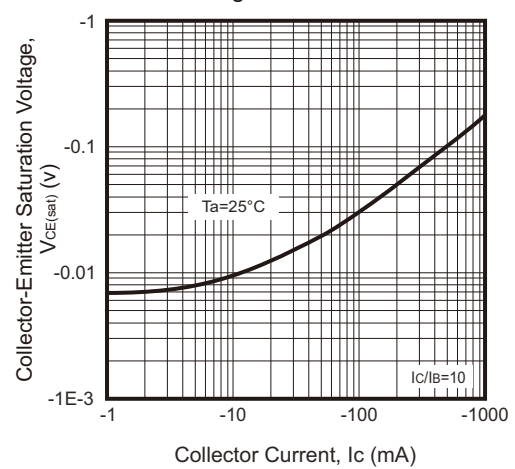
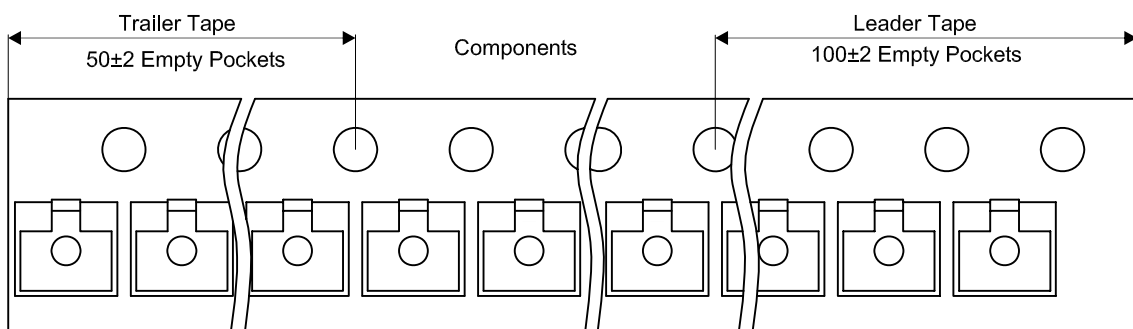
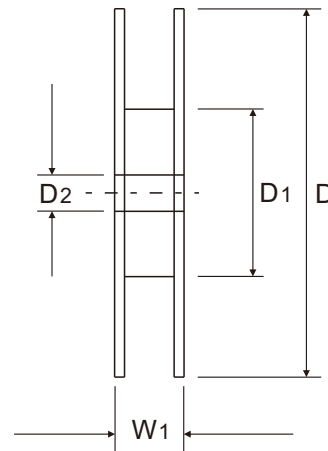
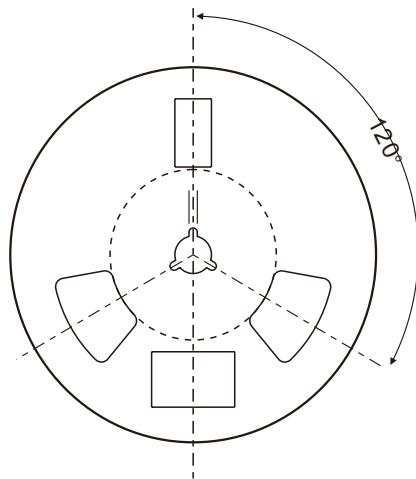
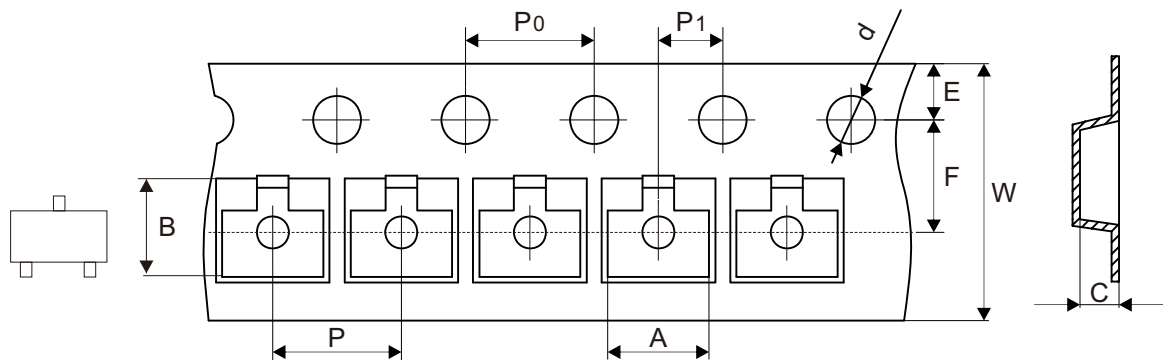


Fig.4 - Collector-Emitter Saturation Voltage vs. Collector Current



Reel Taping Specification

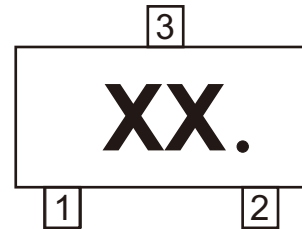


SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	$1.50 + 0.10$ $- 0.00$	178.00 ± 1.00	54.60 ± 1.00	13.30 ± 1.00
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	$0.059 + 0.004$ $- 0.000$	7.008 ± 0.039	2.150 ± 0.039	0.524 ± 0.039

SOT-23	SYMBOL	E	F	P	P0	P1	W	W1
	(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

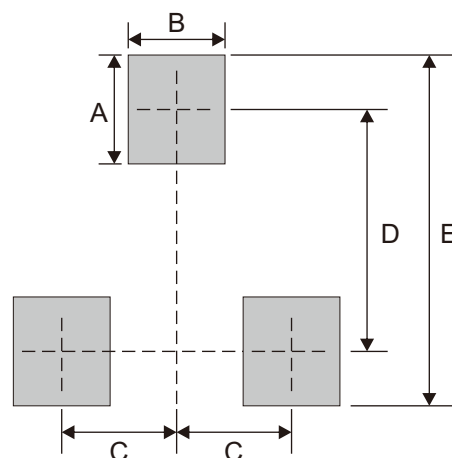
Part Number	Marking Code
ASS8550-L-HF	Y2-L
ASS8550-H-HF	Y2



xx/xxxx = Product type marking code

Suggested 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