

SS8550

DATASHEET

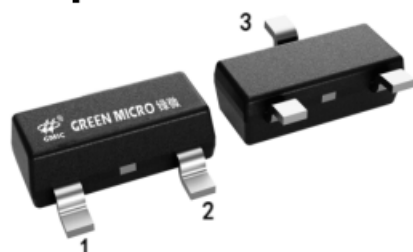
Specification Revision History:

Version	Date	Description
V1.0	2021/11	New
V1.1	2022/03	Modify Ordering Information
V1.2	2024/02	Modify Ordering Information
V1.3	2025/05	Add application precautions and overall typesetting.

Features

- ※PNP Transistors
- ※Collector Current: $I_C = -1.5A$

Simplified Outline



- 1.Base
- 2.Emitter
- 3.Collector

SOT-23

Ordering Information

Product Model	Package Type	Marking	Packing	Packing Qty
SS8550-GM	SOT-23	Y2	REEL	4000PCS/REEL

Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	-40	V
Collector-Emitter Voltage	V_{CE0}	-25	V
Emitter-Base Voltage	V_{EB0}	-5	V
Collector Current -Continuous	I_C	-1.5	A
Collector Power Dissipation	P_C	0.3	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to 150	$^\circ C$

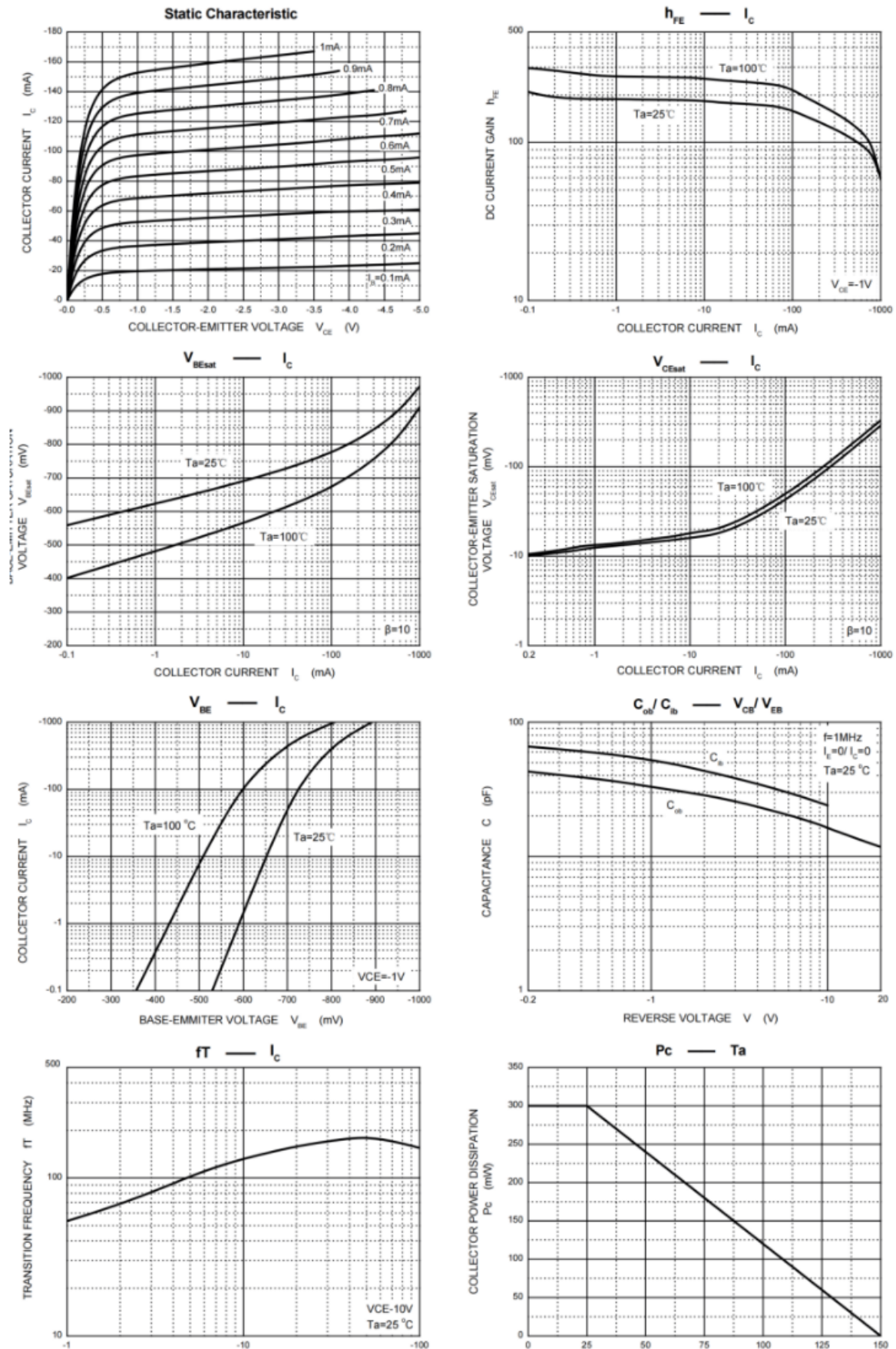
Electrical Characteristics $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CB0}	$I_C = -100\text{ }\mu\text{A}$, $I_E = 0$	-40			V
Collector-emitter breakdown voltage	V_{CE0}	$I_C = -1\text{mA}$, $I_B = 0$	-25			V
Emitter-base breakdown voltage	V_{EB0}	$I_E = -100\text{ }\mu\text{A}$, $I_C = 0$	-5			V
Collector cut-off current	I_{CB0}	$V_{CB} = -40\text{V}$, $I_E = 0$			-0.1	μA
Collector cut-off current	I_{CE0}	$V_{CE} = -20\text{V}$, $I_B = 0$			-1	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = -5\text{V}$, $I_C = 0$			-0.1	μA
DC current gain	h_{FE}	$V_{CE} = -1\text{V}$, $I_C = -100\text{mA}$	120		400	
		$V_{CE} = -1\text{V}$, $I_C = -800\text{mA}$	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
Base-emitter on voltage	$V_{BE(on)}$	$I_C = -1\text{V}$, $V_{CE} = -10\text{mA}$			-1	V
output capacitance	C_{ob}	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$			20	pF
Transition frequency	f_T	$V_{CE} = -10\text{V}$, $I_C = -50\text{mA}$, $f = 30\text{MHz}$	100			MHz

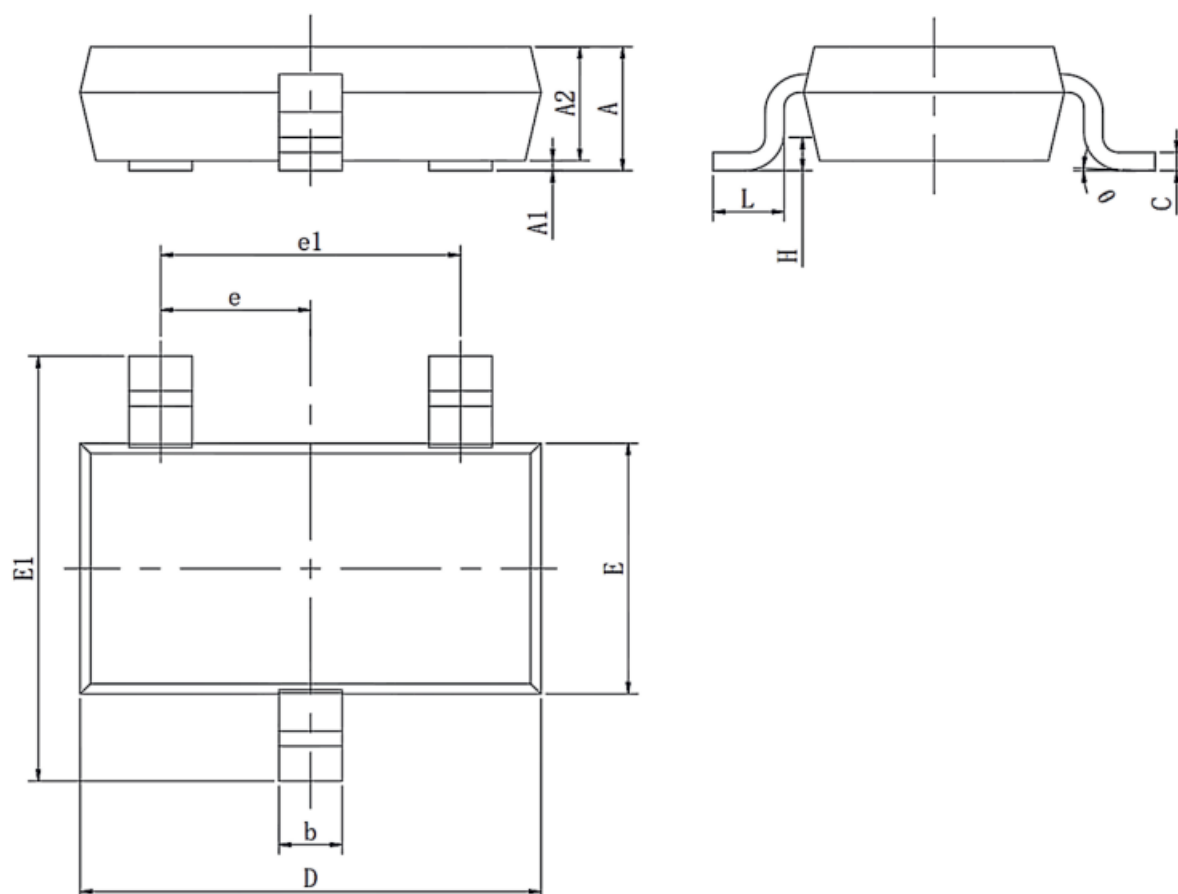
hFE(1) Classification

Type	SS8550
Range	200-350

Typical Characteristics



Outline Dimensions

SOT-23
Unit : mm


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
C	0.080	0.200	0.003	0.008
D	2.800	3.020	0.110	0.119
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.95 (BSC)		0.037(BSC)	
e1	1.90 (BSC)		0.075(BSC)	
L	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

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