



S8550

PNP TRANSISTOR

FEATURES

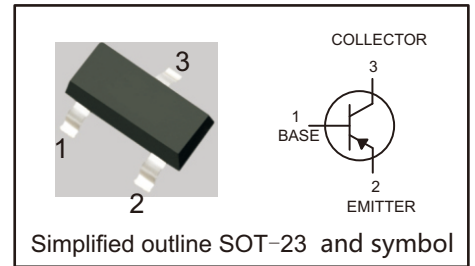
- Complimentary to S8050
- Collector current: $I_C=0.5A$

CLASSIFICATION OF h_{FE}

Rank	L	H	J
Range	120-200	200-350	300-400

PINNING

PIN	DESCRIPTION
1	BASE
2	EMITTER
3	COLLECTOR



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	-500	mA
Collector Power Dissipation	P_C	300	mW
Operation Junction and Storage Temperature Range	T_J, T_{stg}	-55~ +150	$^\circ C$

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ C$ unless otherwise noted.)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -0.1mA, I_E = 0$	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1mA, I_B = 0$	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -0.1mA, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -40V, I_E = 0$			-100	nA
Collector cut-off current	I_{CEO}	$V_{CE} = -20V, I_B = 0$			-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -3V, I_C = 0$			-100	nA
DC current gain	$h_{FE(1)}$	$V_{CE} = -1V, I_C = -50mA$	120		400	
	$h_{FE(2)}$	$V_{CE} = -1V, I_C = -500mA$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$			-0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500mA, I_B = -50mA$			-1.2	V
Transition frequency	f_T	$V_{CE} = -6V, I_C = -20mA, f=30MHz$	150			MHz



TYPICAL CHARACTERISTICS

Fig 1. Static characteristics

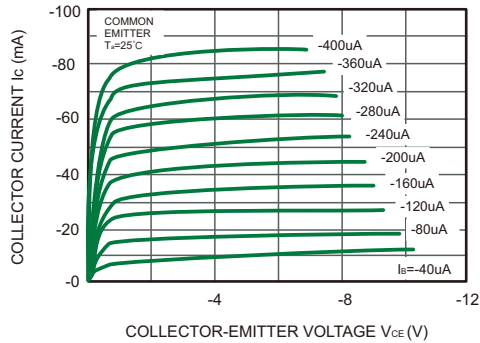


Fig 2. PC — Ta

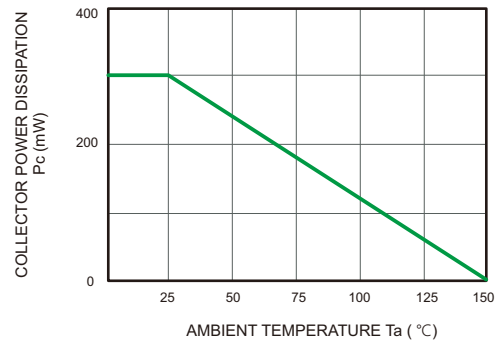


Fig 3. Cob / Cib — VCB / VEB

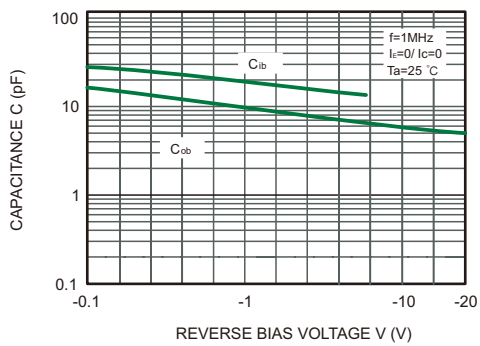


Fig 4. VCEsat — IC

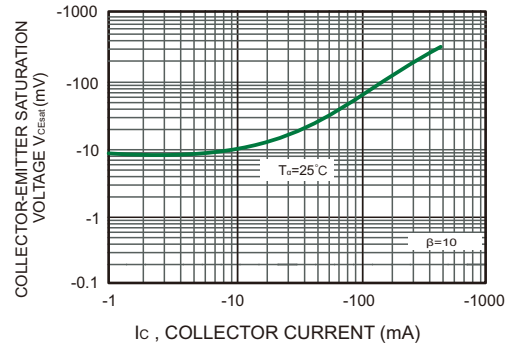


Fig 5. hFE — IC

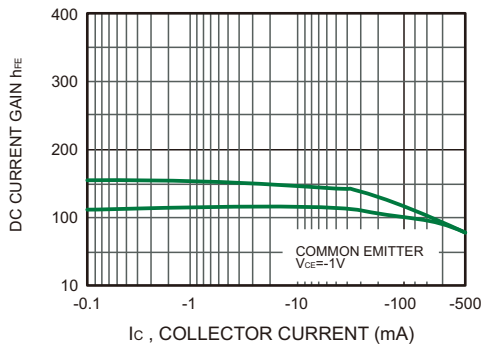


Fig 6. VBEsat — IC

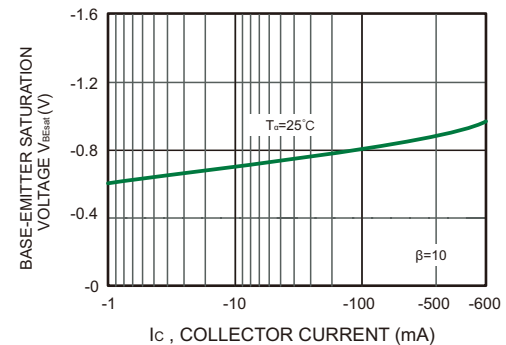


Fig 7. IC — VBE

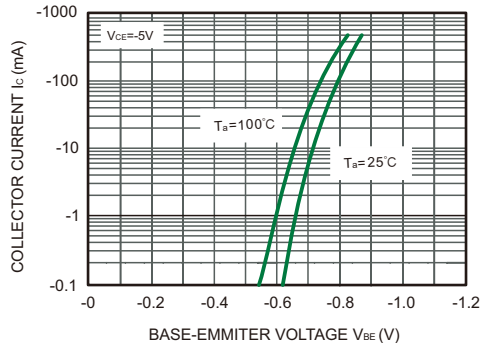
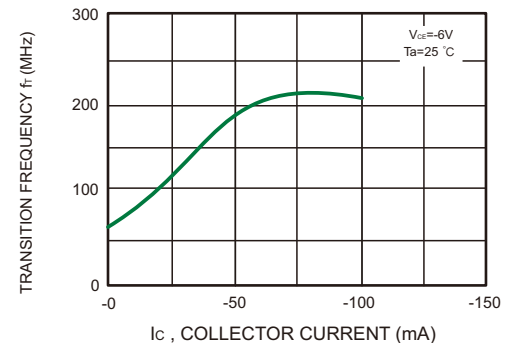
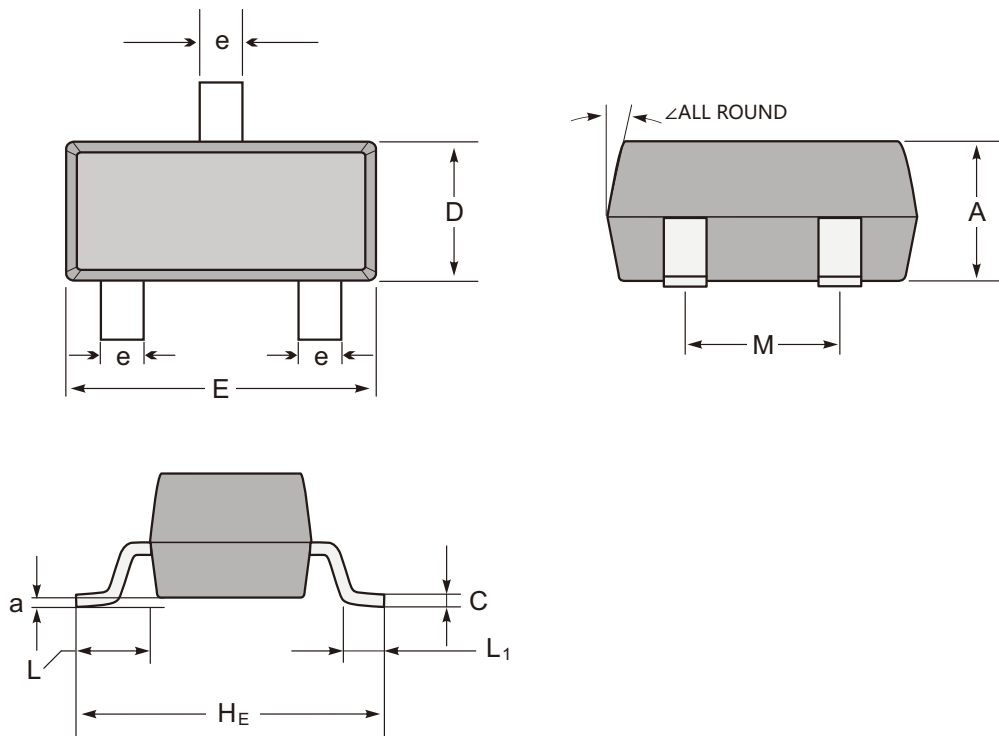


Fig 8. fT — IC





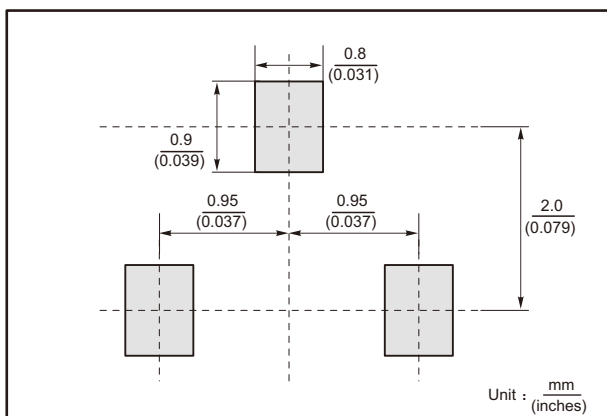
SOT-23 Package Outline Dimensions



SOT-23 mechanical data

UNIT		A	C	D	E	HE	e	M	L	L ₁	a	∠
mm	max	1.1	0.20	1.4	3.0	2.6	0.6	1.95	0.55 (ref)	0.36 (ref)	0.15	12°
	min	0.9	0.08	1.2	2.8	2.2	0.35	1.7			0.0	
mil	max	43	7.9	55	118	102	24	77	22 (ref)	14 (ref)	6	
	min	35	3.1	47	110	87	13	67			0.0	

The recommended mounting pad size



Marking

Type number	Marking code
S8550	2TY



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