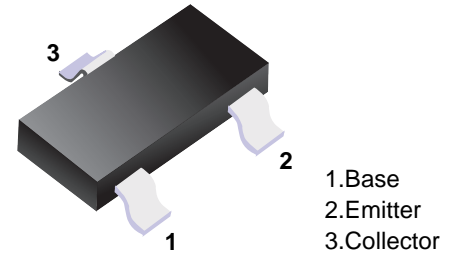


■ **NPN Transistors**

■ **Features**

- Collector Current: $I_C=1.5A$



■ **Simplified outline(SOT-23)**

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

Parameter	Symbol	Rating	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
Collector Dissipation	P_C	0.3	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to 150	$^\circ C$

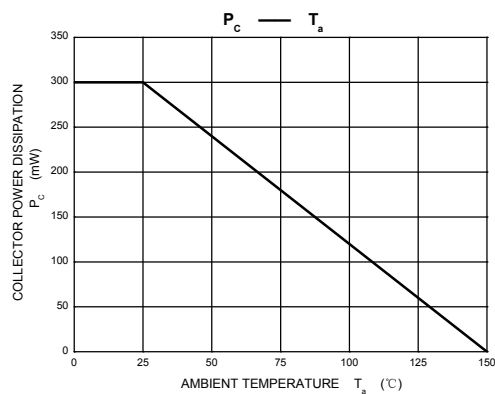
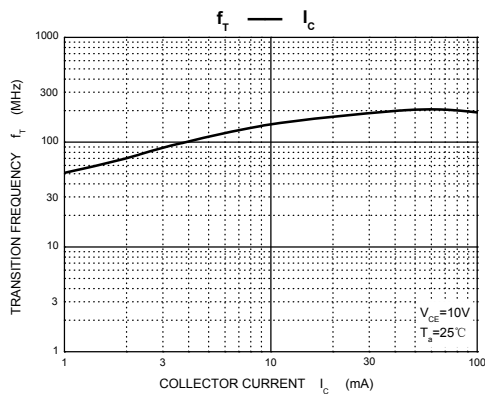
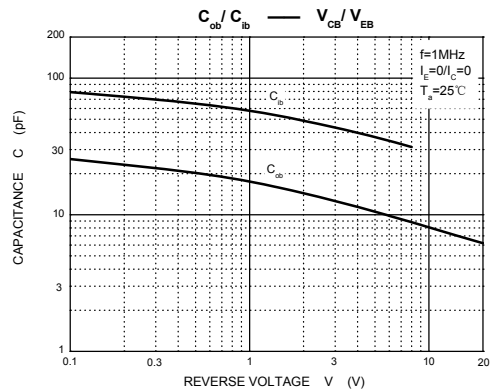
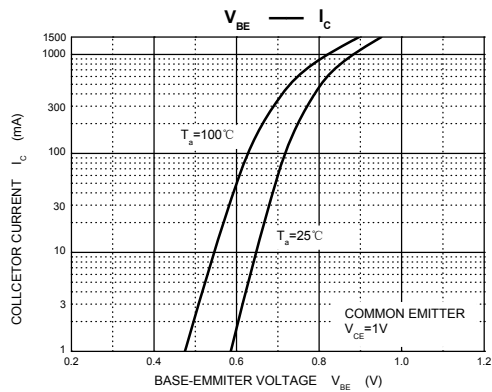
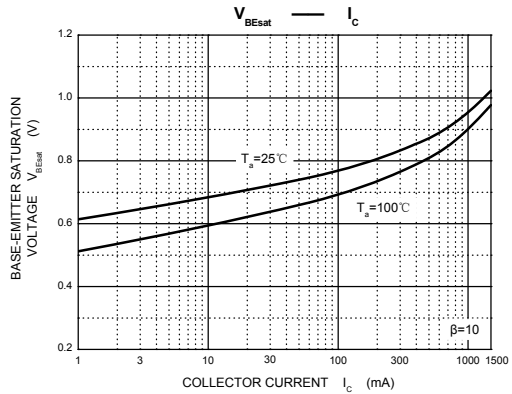
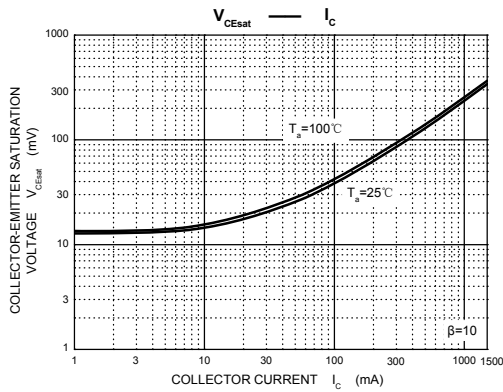
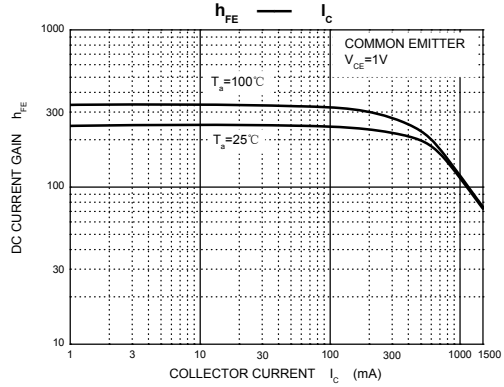
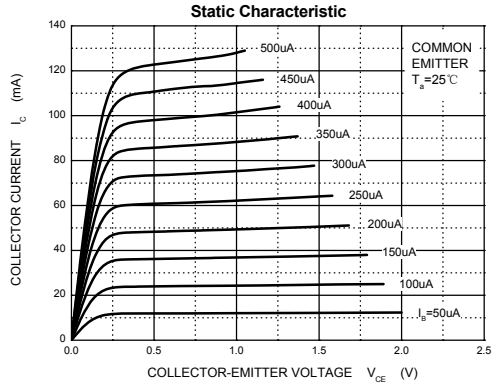
■ **Electrical Characteristics $T_a = 25^\circ C$**

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C = 100 \mu A, I_E = 0$	40			V
Collector-emitter breakdown voltage	V_{CEO}	$I_C = 1mA, I_B = 0$	25			V
Emitter-base Breakdown voltage	V_{EBO}	$I_E = 100 \mu A, I_C = 0$	5			V
Collector-base cut-off current	I_{CBO}	$V_{CB} = 40 V, I_E = 0$			0.1	μA
Collector-emitter cut-off current	I_{CEO}	$V_{CE} = 20 V, I_B = 0$			1	μA
Emitter-base cut-off current	I_{EBO}	$V_{EB} = 5 V, I_C = 0$			0.1	μA
DC current gain	h_{FE}	$V_{CE} = 1 V, I_C = 100 mA$	120		400	
		$V_{CE} = 1 V, I_C = 800 mA$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 800 mA, I_B = 80 mA$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 800 mA, I_B = 80 mA$			1.2	V
Transition frequency	f_T	$V_{CE} = 10 V, I_C = 50 mA, f = 30 MHz$	100			MHz

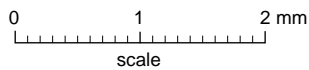
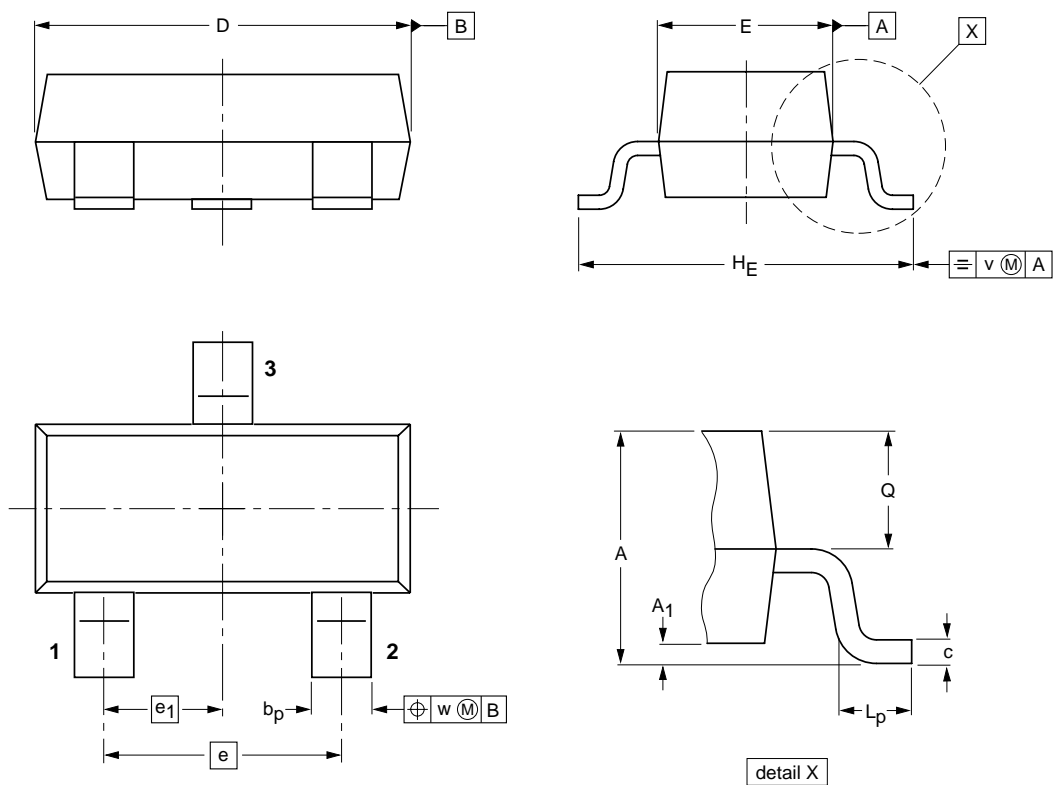
■ **$h_{FE}(1)$ Classification**

Type	SS8050	SS8050-L	SS8050-H	SS8050-J
Range	200-350	120-200	144-202	300-400
Marking	Y1			

■ Typical Characteristics



■ SOT-23



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max.	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w
mm	1.1 0.9	0.1	0.48 0.38	0.15 0.09	3.0 2.8	1.4 1.2	1.9	0.95	2.5 2.1	0.45 0.15	0.55 0.45	0.2	0.1