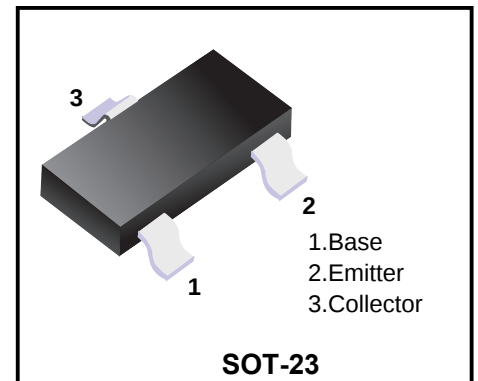


NPN Transistors

FEATURES

- Collector Current: $I_C=1.5A$



MAXIMUM RATINGS ($T_a=25^{\circ}C$ unless otherwise noted)

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	$^{\circ}C$

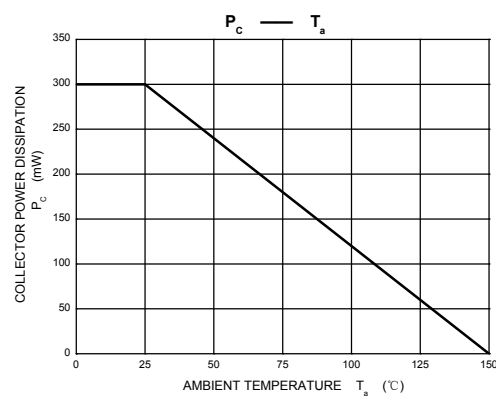
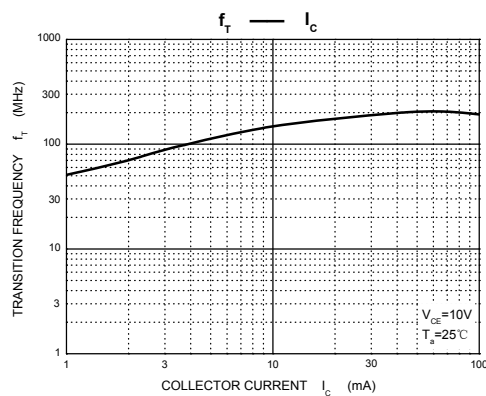
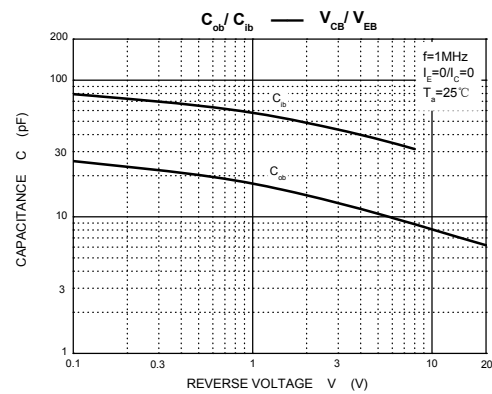
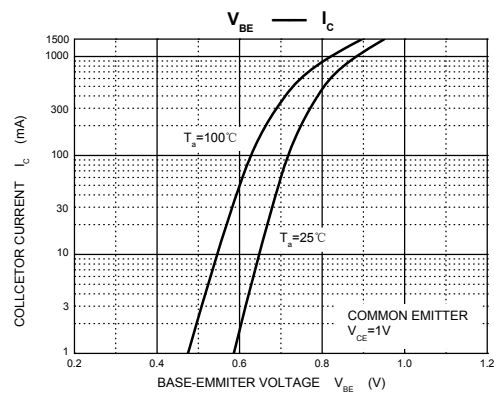
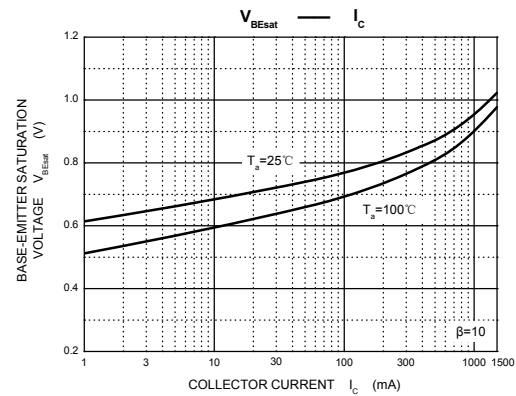
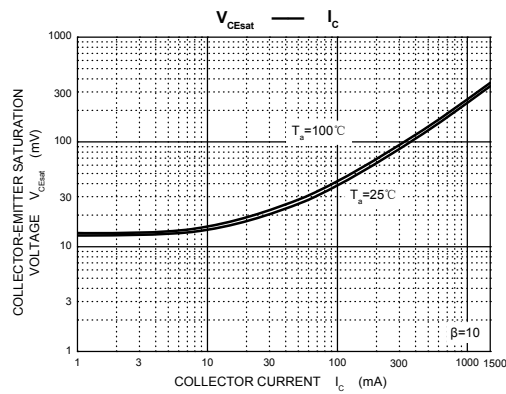
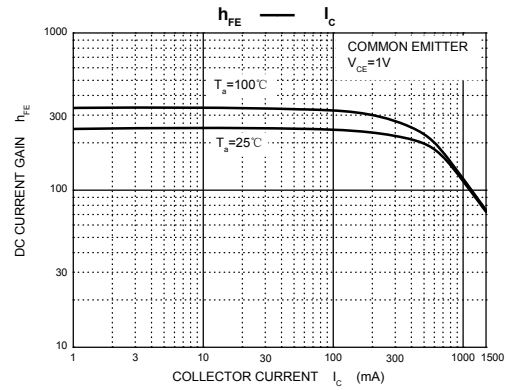
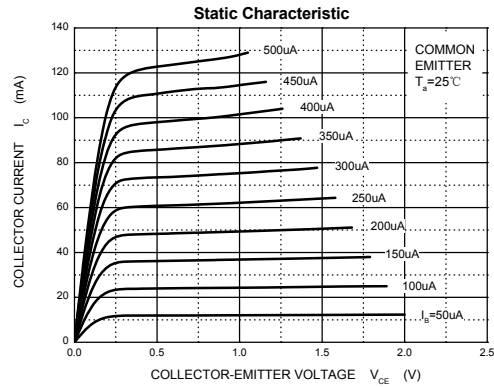
ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}C$ unless otherwise specified)

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

h_{FE} Classification

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

Ratings and Characteristic Curves



Ordering information

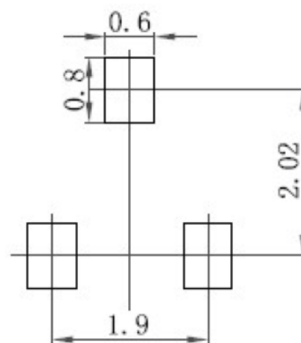
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel, 7" reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

Package Dimensions

SOT-23

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.1	110	122
E	1.2	1.4	47	55
E	1.9		75	
E1	0.95		37	
HE	2.1	2.6	83	102
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

The recommended mounting pad size



Disclaimer

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