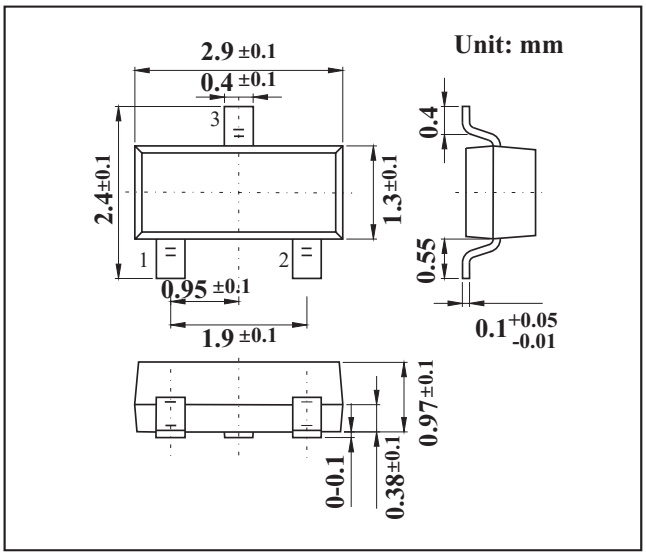
SOT-23 Plastic-Encapsulate Transistors

Features

- Collector Power Dissipation: P_C=0.3W
- Collector Current: I_C=1.5A
- NPN General Purpose Transistors

MECHANICAL DATA

- Case style:SOT-23molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (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 Power Dissipation	P_C	0.3	W
Junction Temperature	T_j	150	℃
Storage Temperature	T_{stg}	-55 to 150	℃

PACKAGE INFORMATION

Device	Package	Shipping
SS8050	SOT-23	3000/Tape&Reel

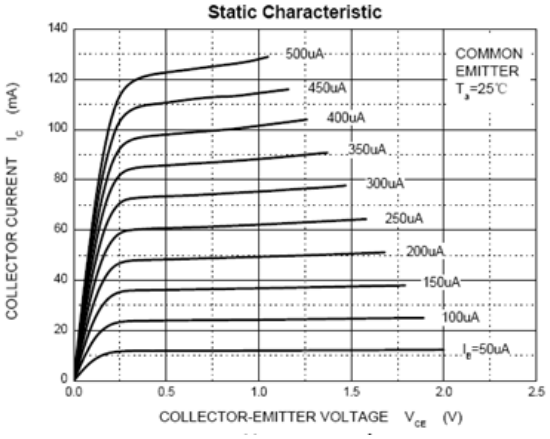
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C = 100 μA , I_E = 0	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C = 1mA , I_B = 0	25			V
Emitter-base Breakdown voltage	$V_{(BR)EBO}$	I_E = 100 μA , I_C = 0	5			V
Collector-base cut-off 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			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	200		350	
		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

■ Marking

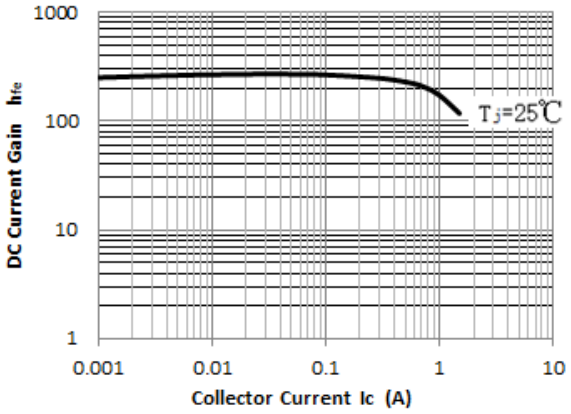
Marking	Y1

RATINGS AND CHARACTERISTIC CURVES

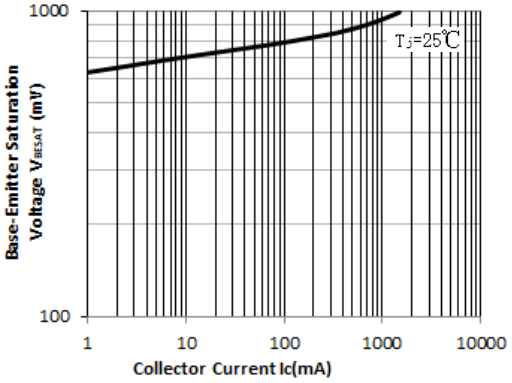
Static Characteristic



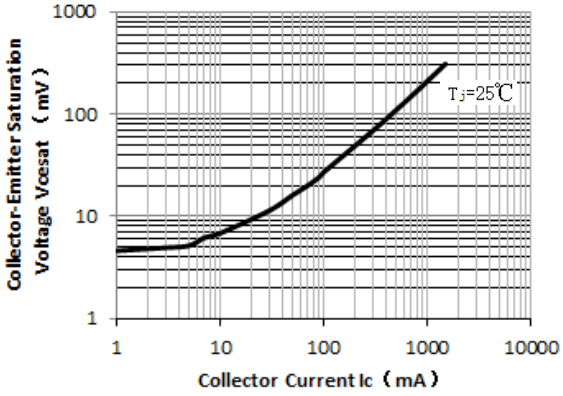
h_{FE} — I_C



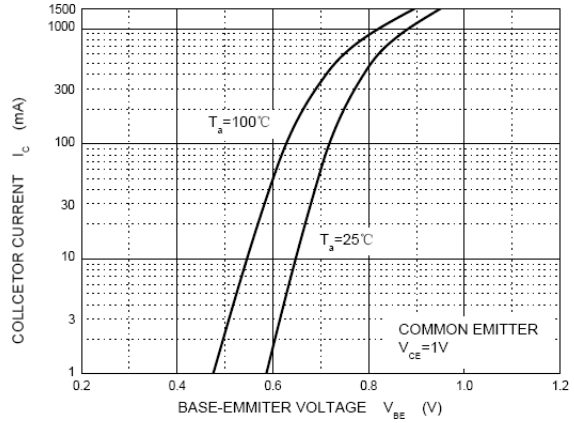
V_{BESAT}-Ic



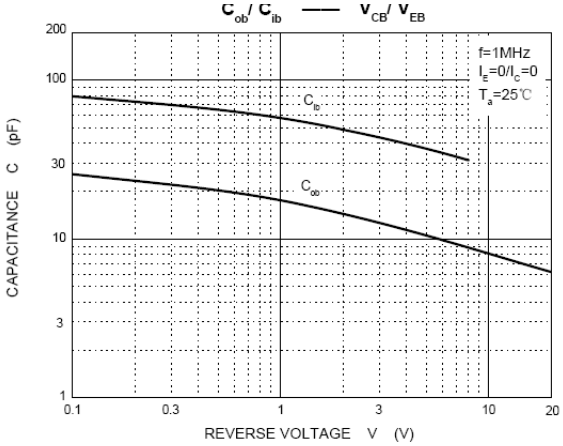
V_{CESAT}-Ic



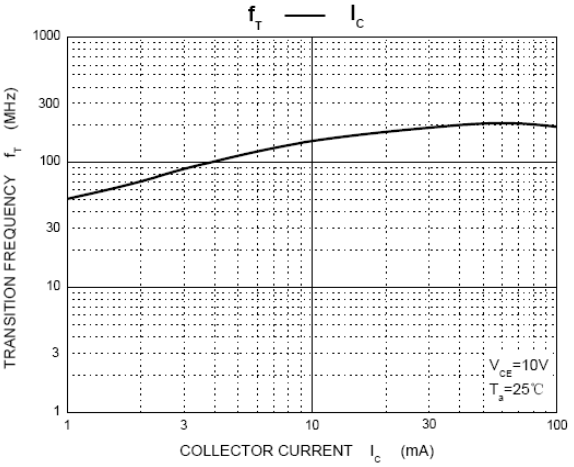
V_{BE} — I_C



C_{ob}/ C_{ib} — V_{CB}/ V_{EB}



f_T — I_C



P_C — T_a

