POWER SKY (H.K.) LTD.

TO-251/TO-252-2Plastic-Encapsulate Transistors

2SB1202 TRANSISTOR (PNP)

TO-251
TO-252-2

1.BASE

2.COLLECTOR

3.EMITTER

FEATURES

- Adoption of FBET,MBIT processes
- Large current capacity and wide ASO
- Low collector-to-emitter saturation voltage
- Fast switching speed

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current –Continuous	-3	A
P_C	Collector Power Dissipation	1	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

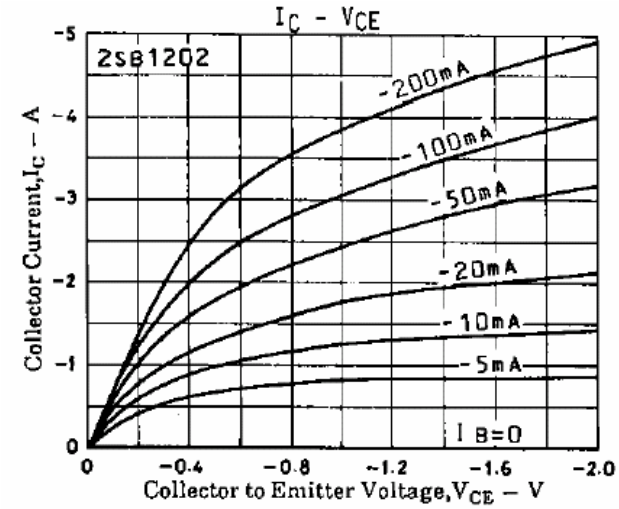
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	Ic=-100μA, I_E=0	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	Ic=-1mA, I_B=0	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA, I_C=0	-6			V
Collector cut-off current	I_{CBO}	V_{CB}=-40V, I_E=0			-1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-4V, I_C=0			-1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=-2V, I_C=-100mA	100		560	
	$h_{FE(2)}$	V_{CE}=-2V, I_C=-3A	35			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-2A, I_B=-100mA			-0.7	V
Transition frequency	f_T	V_{CE}=-10V, I_C=-50mA		150		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz		39		pF

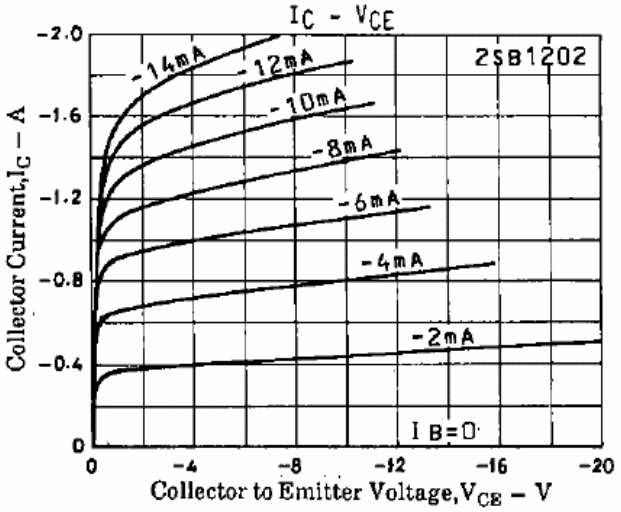
CLASSIFICATION OF $h_{FE(1)}$

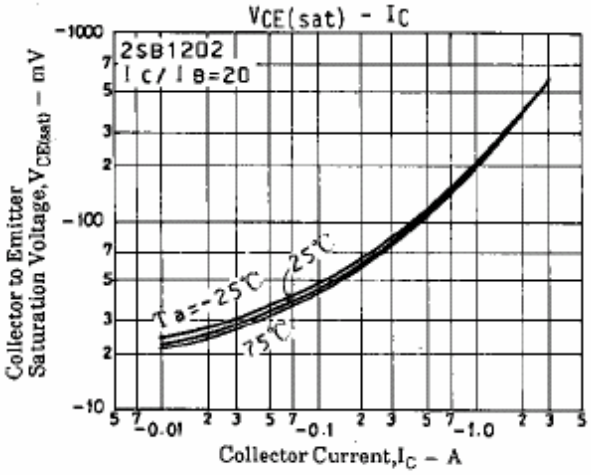
Rank	R	S	T	U
Range	100-200	140-280	200-400	280-560

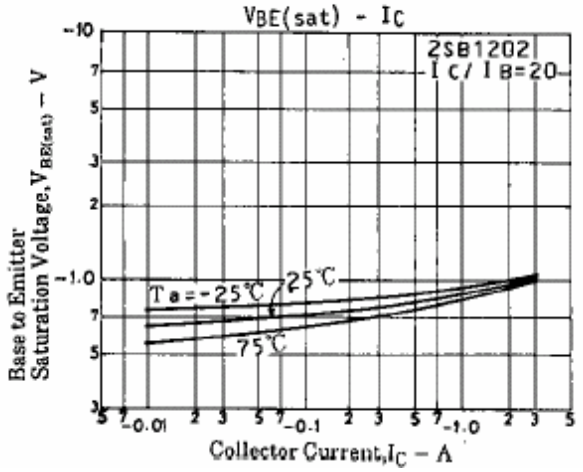
Typical Characteristics

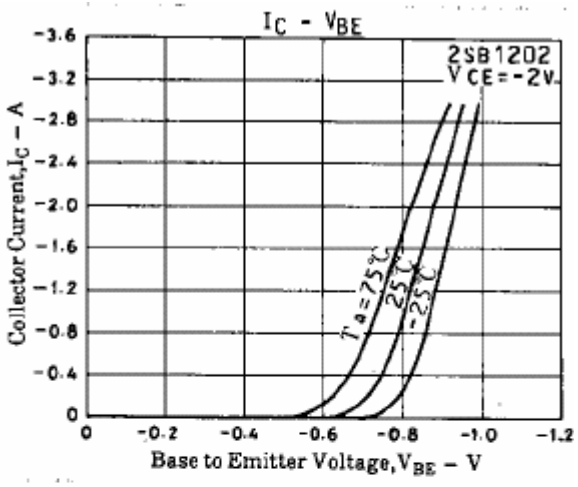
2SB1202

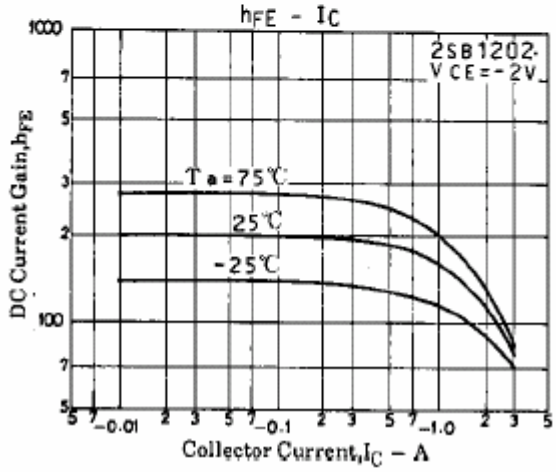


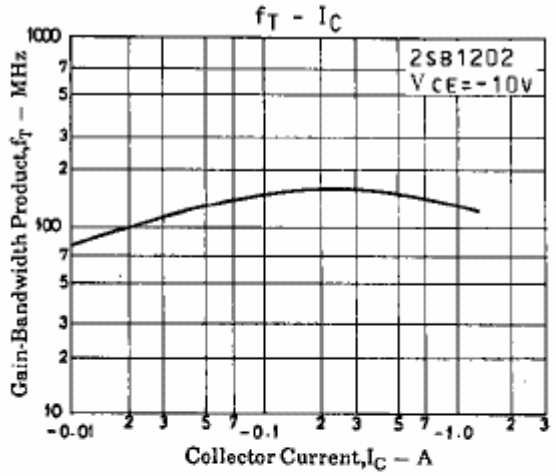


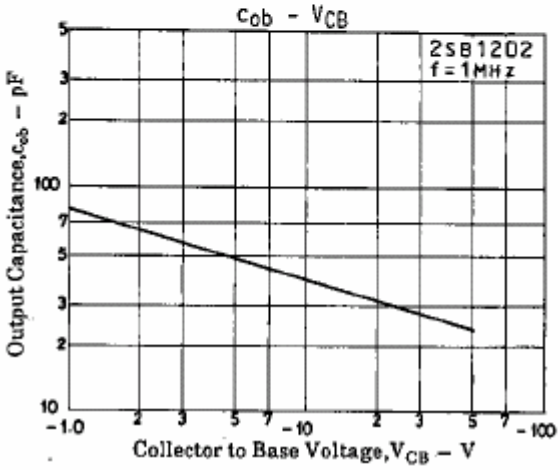


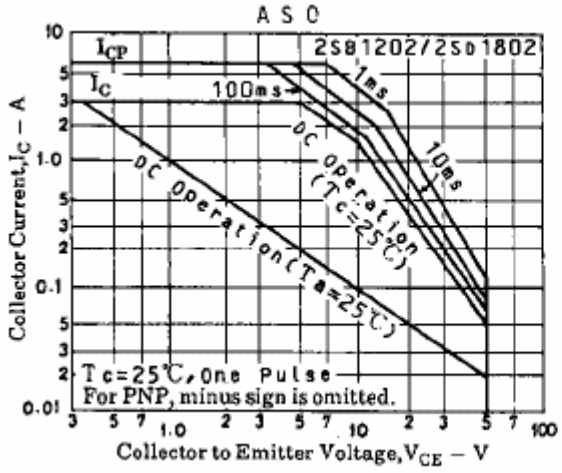


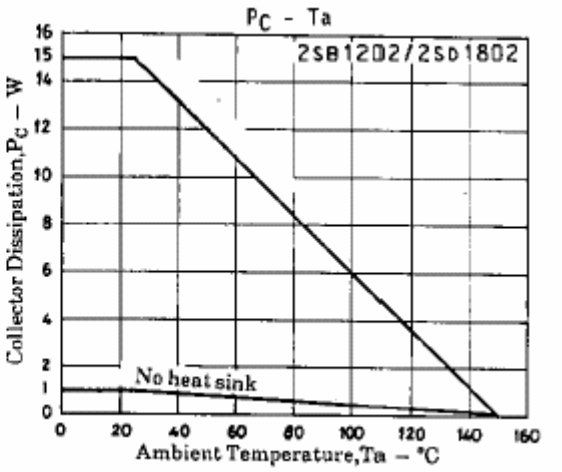









A S O
2SB1202/2SD1802
I_{CP}
I_C
1ms
100ms
10ms
DC operation
DC operation (Tc=25℃)
Tc=25℃, One Pulse
For PNP, minus sign is omitted.
Collector Current, I_C – A
Collector to Emitter Voltage, V_{CE} – V


P_C - Ta
2SB1202/2SD1802
No heat sink
Collector Dissipation, P_C – W
Ambient Temperature, Ta – °C