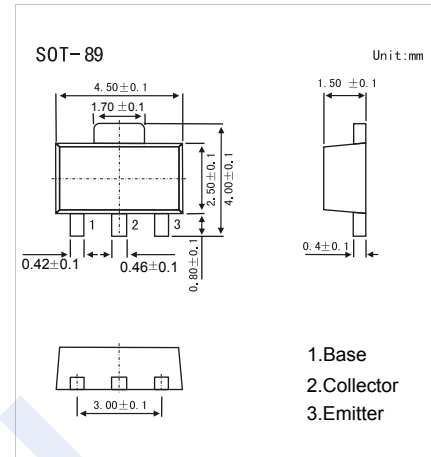


PNP Transistors

2SB1120

■ Features

- Very small size making it easy to provide high density, small-sized hybrid IC's.
- Low collector-to-emitter saturation voltage
- Large current capacity : $I_C = -2.5A$, $I_{CP} = -5A$.

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-20	V
Collector - Emitter Voltage	V_{CEO}	-10	
Emitter - Base Voltage	V_{EBO}	-7	
Collector Current - Continuous	I_C	-2.5	A
Collector current -Pulse	I_{CP}	-5	
Collector Power Dissipation (Note.1)	P_C	0.5	W
		1.3	
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

Note.1: Mounted on ceramic board (250mm² × 0.8mm)

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = -100 \mu\text{A}$, $I_E = 0$	-20			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = -1 \text{ mA}$, $R_{BE} = \infty$	-10			
Emitter - base breakdown voltage	V_{EBO}	$I_E = -100 \mu\text{A}$, $I_C = 0$	-7			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -16V$, $I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4V$, $I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1.5 \text{ A}$, $I_B = -150 \text{ mA}$		-0.25	-0.45	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -1.5 \text{ A}$, $I_B = -150 \text{ mA}$			-1.2	
DC current gain	h_{FE}	$V_{CE} = -2V$, $I_C = -500 \text{ mA}$	100		560	
		$V_{CE} = -2V$, $I_C = -3 \text{ A}$	70			
Collector output capacitance	C_{ob}	$V_{CB} = -10V$, $I_E = 0$, $f = 1 \text{ MHz}$		70		μF
Transition frequency	f_T	$V_{CE} = -10V$, $I_C = -50 \text{ mA}$		250		MHz

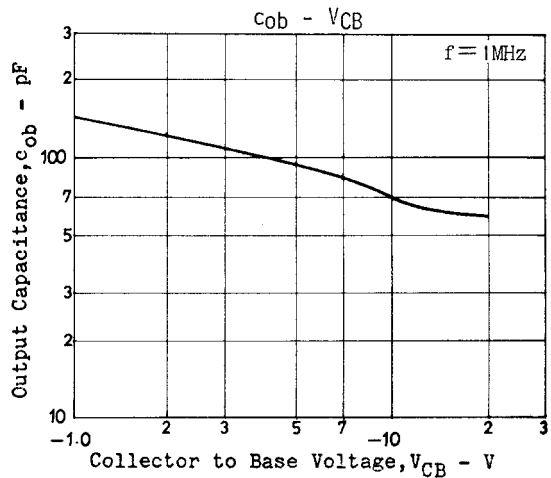
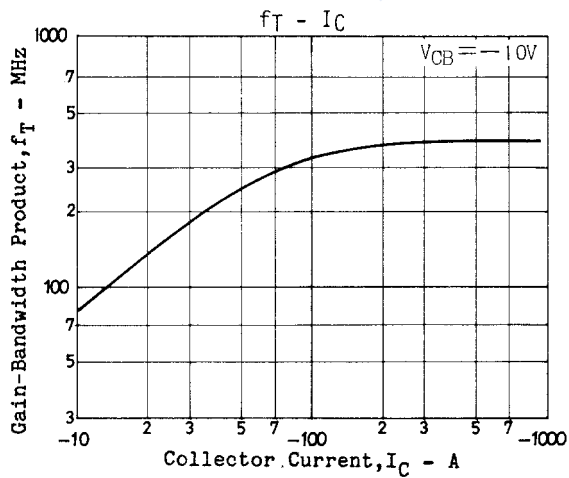
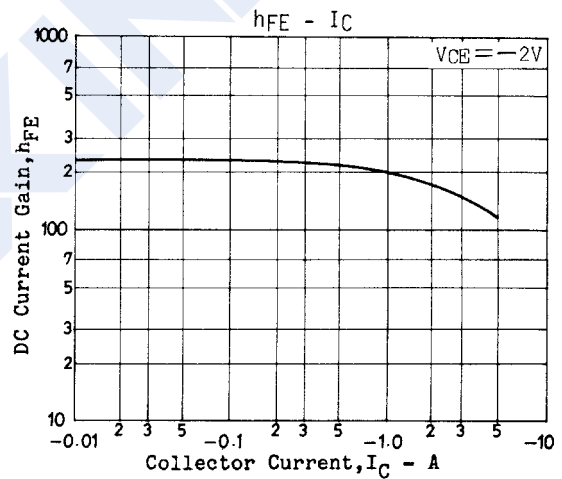
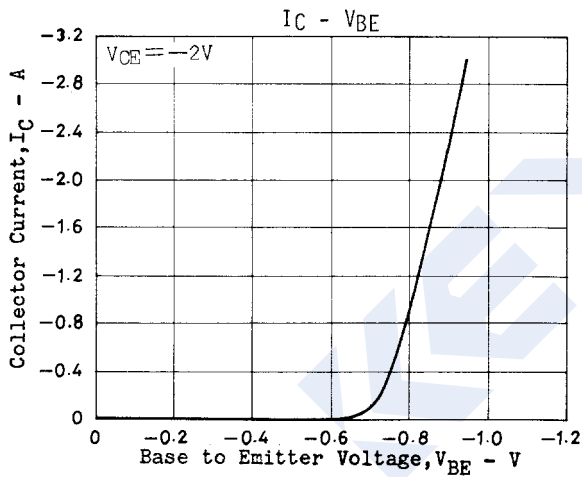
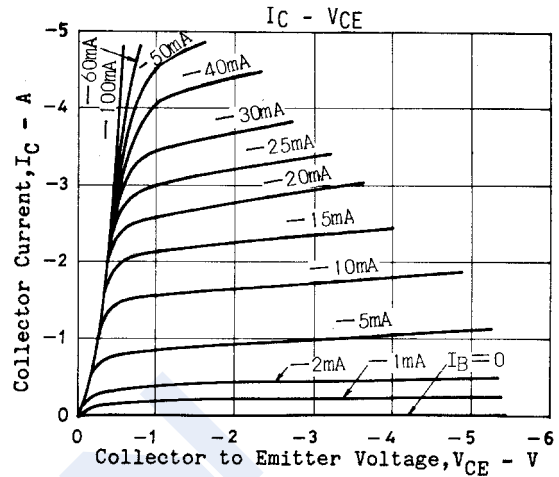
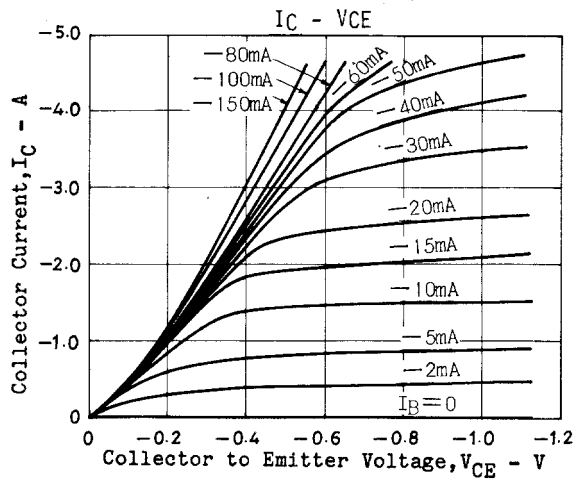
■ Classification of $h_{FE(1)}$

Type	2SB1120-E	2SB1120-F	2SB1120-G
Range	100-200	160-320	280-560
Marking	BC E*	BC F*	BC G*

PNP Transistors

2SB1120

■ Typical Characteristics



PNP Transistors

2SB1120

■ Typical Characteristics

