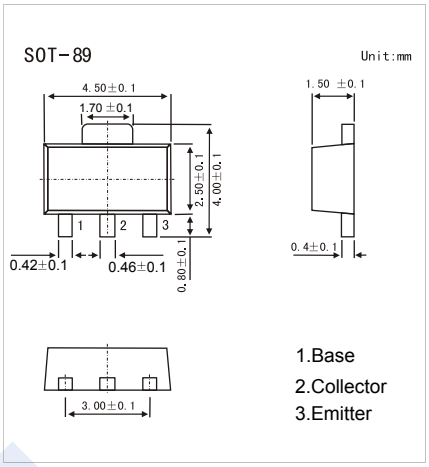
PNP Transistors

2SB1122



■ Features

- Very small size making it easy to provide high highdensity, small-sized hybrid IC's.
- Complementary to 2SD1622

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-60	V
Collector - Emitter Voltage	V_{CEO}	-50	
Emitter - Base Voltage	V_{EBO}	-5	
Collector Current - Continuous	I_C	-1	A
Collector current -Pulse	I_{CP}	-2	
Collector Power Dissipation (Note.1)	P_C	0.5	W
		1.3	
Junction Temperature	T_J	150	℃
Storage Temperature range	T_{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= -100 μA, I_E=0	-60			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= -1 mA, R_{BE}=∞	-50			
Emitter - base breakdown voltage	V_{EBO}	I_E= -100 μ A, I_C=0	-5			
Collector-base cut-off current	I_{CBO}	V_{CB}= -50V , I_E=0			-0.1	uA
Emitter cut-off current	I_{EBO}	V_{EB}= -4V , I_C=0			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-500 mA, I_B=-50mA		-0.18	-0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=-500 mA, I_B=-50mA		-0.9	-1.2	
DC current gain	h_{FE}	V_{CE}= -2V, I_C= -100 mA	100		560	
		V_{CE}= -2V, I_C= -1 A	30			
Turn-ON Time	t_{on}	See specified Test Circuit.		40		ns
Storage Time	t_{stg}			300		
Fall Time	t_f			30		
Collector output capacitance	C_{ob}	V_{CB} = –10V, I_E = 0, f = 1MHz		12		pF
Transition frequency	f_T	V_{CE}= -10V, I_C= -50mA		150		MHz

■ Classification of $h_{fe(1)}$

Type	2SB1122-R	2SB1122-S	2SB1122-T	2SB1122-U
Range	100-200	140-280	200-400	280-560
Marking	BE R*	BE S*	BE T*	BE U*

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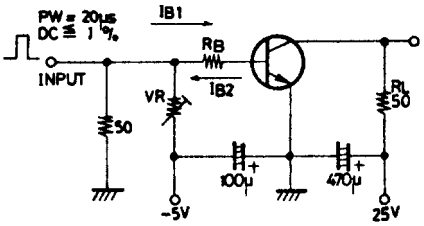
Switching Time Test Circuit

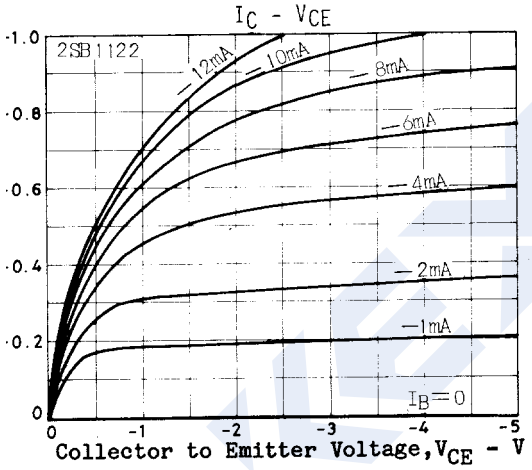


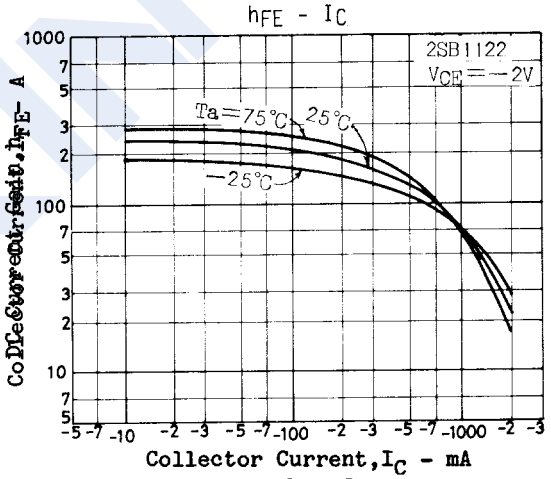
$I_C = 10 I_{B1} = -10 I_{B2} = 500mA$

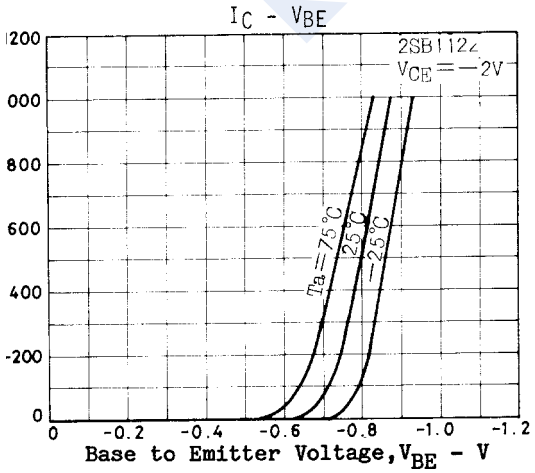
(For PNP, the polarity is reversed.)

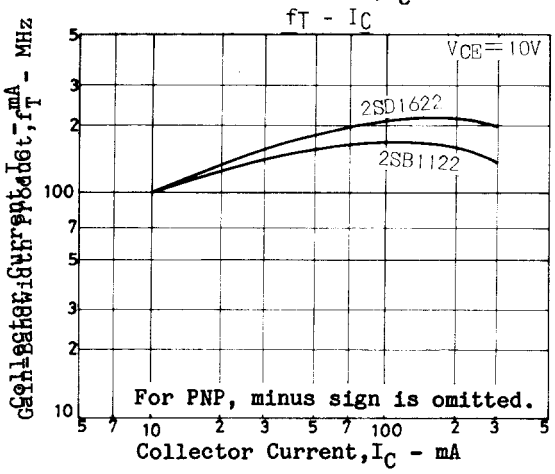
Unit (resistance : Ω, capacitance : F)

■ Typical Characterisitics









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■ Typical Characterisitics