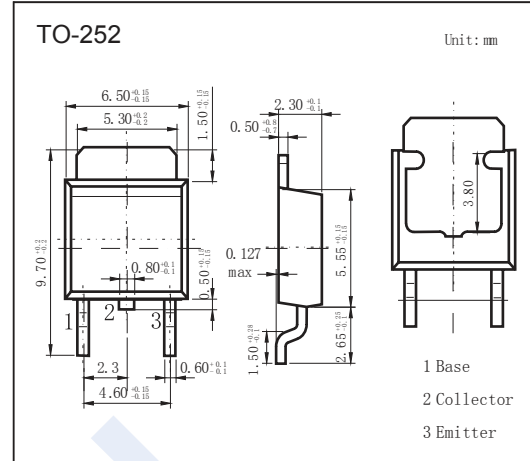


PNP Transistors

2SB1201

■ Features

- Low collector-to-emitter saturation voltage.
- Fast switching speed.
- Large current capacity and wide ASO.
- Complementary to 2SD1801



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CBO}	-60	V
Collector - Emitter Voltage	V _{CEO}	-50	
Emitter - Base Voltage	V _{EBO}	-6	
Collector Current - Continuous	I _C	-2	A
Collector Current - Pulse	I _{CP}	-4	
Collector Power Dissipation	P _C	15	W
T _c = 25°C		0.8	
Junction Temperature	T _J	150	°C
Storage Temperature range	T _{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25°C

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 μA, I _C =0	-6			
Collector-base cut-off current	I _{CBO}	V _{CB} = -50V, I _E =0			-0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} = -5V, I _C =0			-0.1	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-1 A, I _B =-50mA		-0.3	-0.7	V
Base - emitter saturation voltage	V _{BE(sat)}	I _C =-1 A, 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 = -1.5 A	40			
Turn-ON Time	t _{on}	See specified Test Circuit		60		ns
Storage Time	t _{stg}			450		
Fall Time	t _f			30		
Collector output capacitance	C _{ob}	V _{CB} = -10V, I _E = 0, f=1MHz		22		pF
Transition frequency	f _T	V _{CE} = -10V, I _C = -50mA		150		MHz

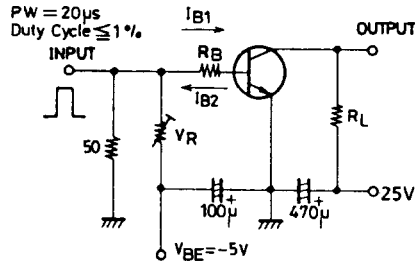
■ Classification of h_{FE}(1)

Type	2SB1201-R	2SB1201-S	2SB1201-T	2SB1201-U
Range	100-200	140-280	200-400	280-560

PNP Transistors

2SB1201

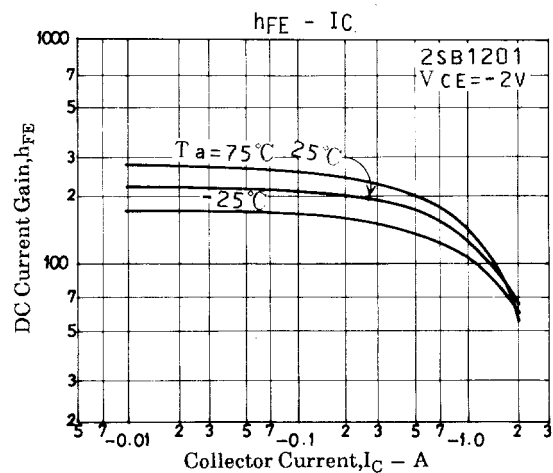
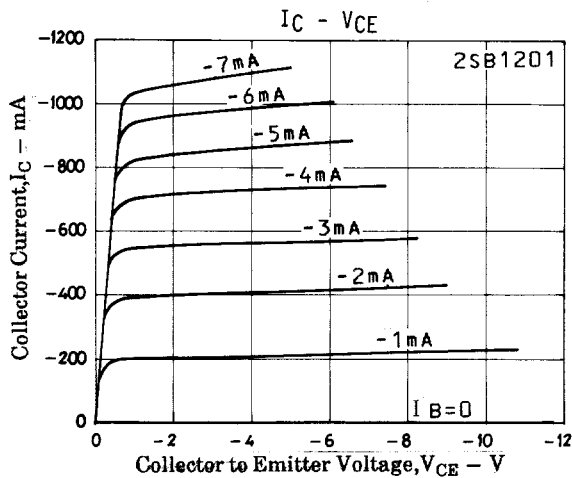
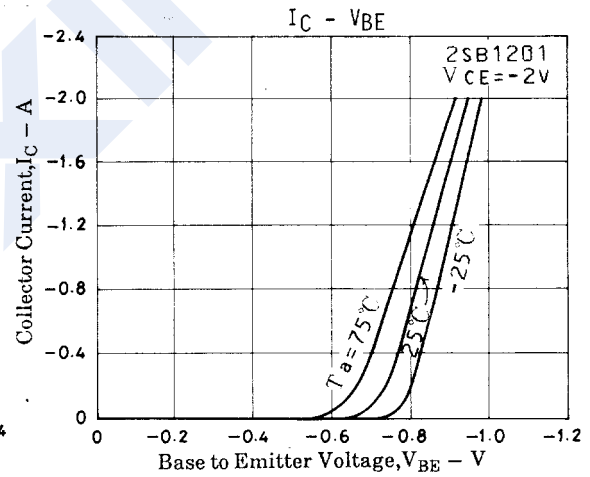
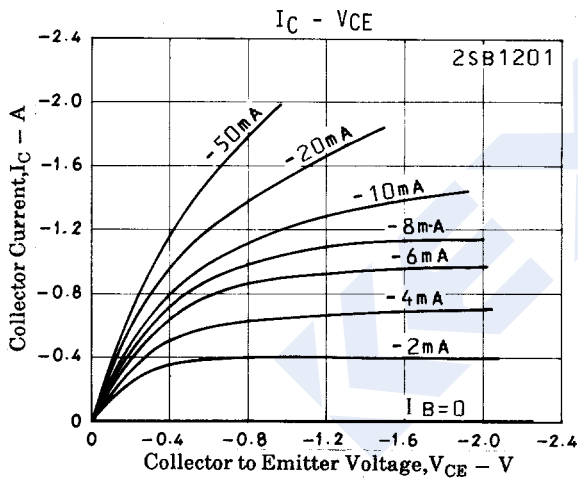
Switching Time Test Circuit



$I_C = 10 I_{B1} = -10 I_{B2} = 500 \text{ mA}$, $V_{CE} = 25 \text{ V}$
 (For PNP, the polarity is reversed.)

Unit (resistance : Ω , capacitance : F)

Typical Characteristics



PNP Transistors

2SB1201

■ Typical Characteristics

