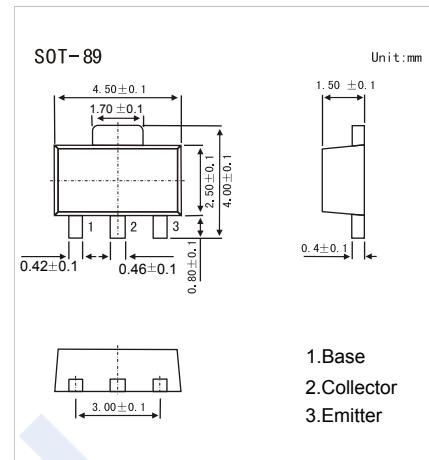


NPN Transistors**2SD1621****■ Features**

- Low collector-to-emitter saturation voltage.
- Large current capacity and wide ASO.
- Fast switching speed.
- Complementary transistor with the 2SB1121

**■ Absolute Maximum Ratings Ta = 25°C**

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CBO}	30	V
Collector - Emitter Voltage	V _{CEO}	25	
Emitter - Base Voltage	V _{EBO}	6	
Collector Current - Continuous	I _C	2	A
Collector current -pulse	I _{CP}	5	
Collector Power Dissipation	P _C	500	mW
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	30			V
Collector- emitter breakdown voltage	V _{CEO}	I _C = 1 mA, R _{BE} = ∞	25			
Emitter - base breakdown voltage	V _{EBO}	I _E = 100 μA, I _C = 0	6			
Collector-base cut-off current	I _{CBO}	V _{CB} = 20V , 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 =1.5A, I _B =75mA		0.18	0.4	V
Base - emitter saturation voltage	V _{BE(sat)}	I _C =1.5A, I _B =75mA		0.85	1.2	
DC current gain	h _{FE}	V _{CE} = 2V, I _C = 100mA	100		560	
		V _{CE} = 2V, I _C = 1.5A	65			
Turn-on time	t _{on}	See specified Test Circuit.		60		ns
Storage time	t _{stg}			500		
Turn-off time	t _{off}			25		
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f=1MHz		19		pF
Transition frequency	f _T	V _{CE} = 10V, I _C = 50mA		150		MHz

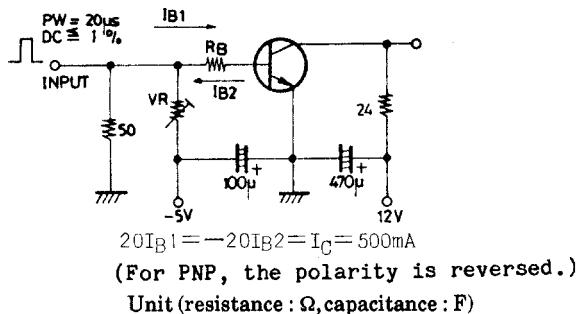
■ Classification of h_{fe(1)}

Type	2SD1621-R	2SD1621-S	2SD1621-T	2SD1621-U
Range	100-200	140-280	200-400	280-560
Marking	DDR	DDS	DDT	DDU

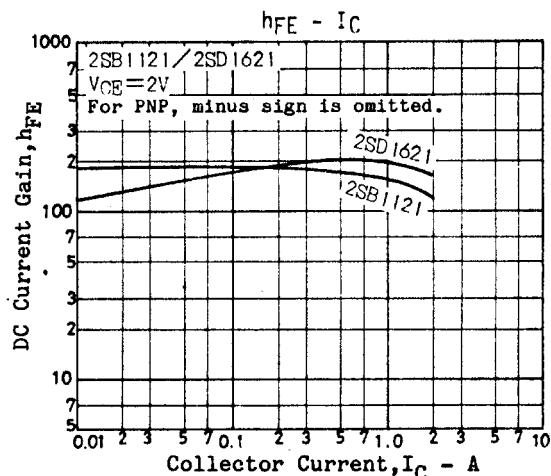
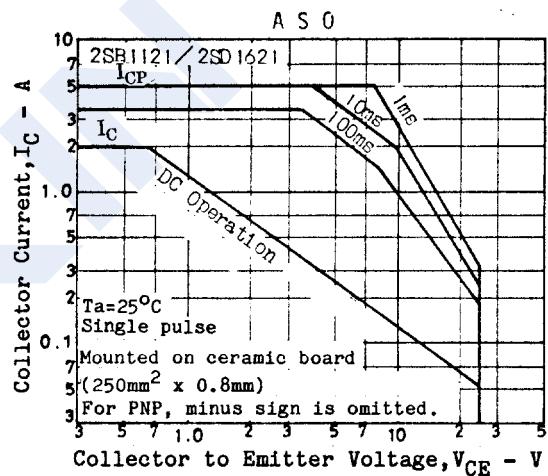
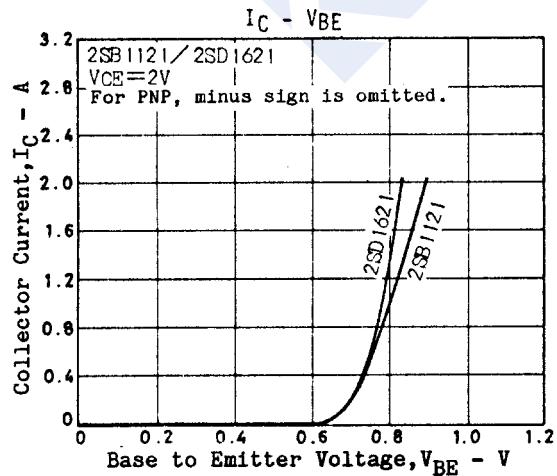
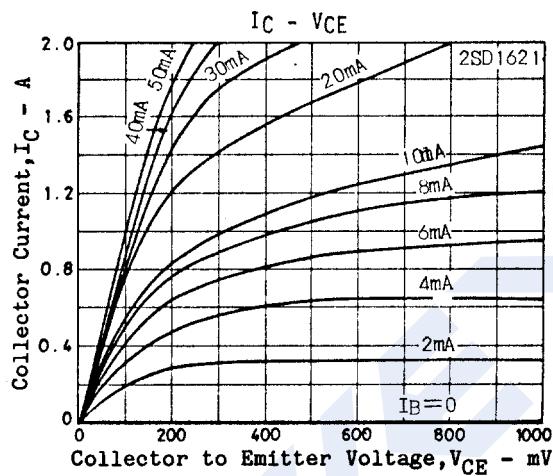
NPN Transistors

2SD1621

Switching Time Test Circuit



■ Typical Characteristics



NPN Transistors

2SD1621

■ Typical Characteristics

