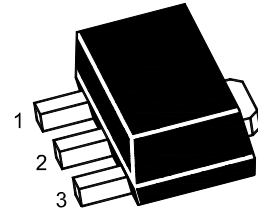


### Plastic-Encapsulate Transistors

TRANSISTOR (PNP)

#### ■ Features

- Adoption of FBET, MBIT processes.
- Low collector-to-emitter saturation voltage.
- Large current capacity and wide ASO.
- Fast switching speed.
- Complementary to 2SD1623U

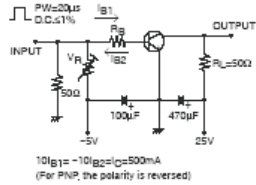


1.Base 2.Collector 3.Emitter  
SOT-89 Plastic Package

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V <sub>CBO</sub>	-60	V
Collector-emitter voltage	V <sub>CEO</sub>	-50	V
Emitter-base voltage	V <sub>EBO</sub>	-6	V
Collector current	I <sub>C</sub>	-2	A
Collector current (pulse)	I <sub>CP</sub>	-4	A
Collector dissipation	P <sub>C</sub>	0.5	W
Mounted on a ceramic board (250mm250.8mm)		1.3	W
Jumction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

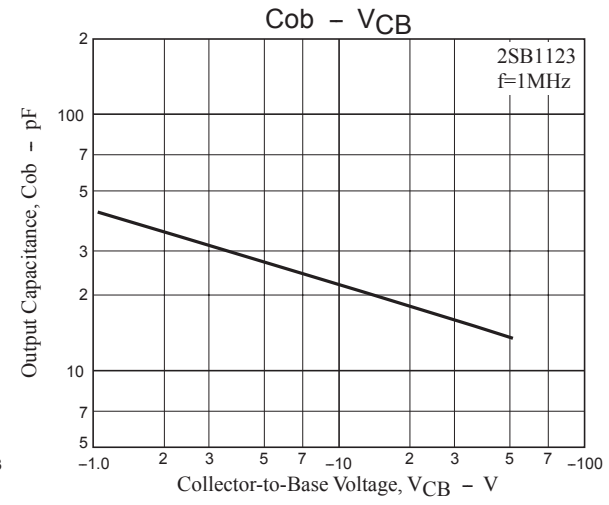
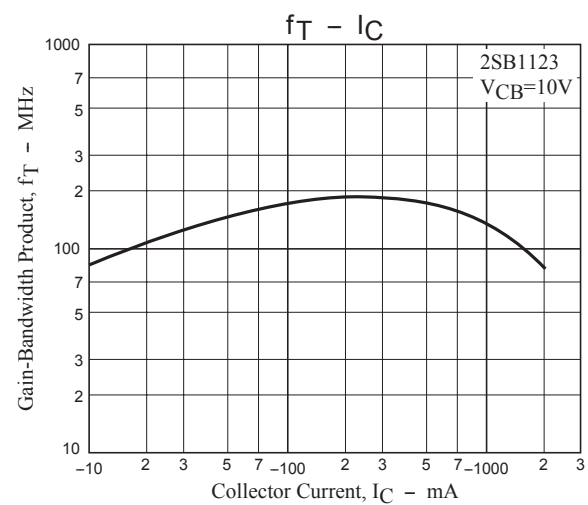
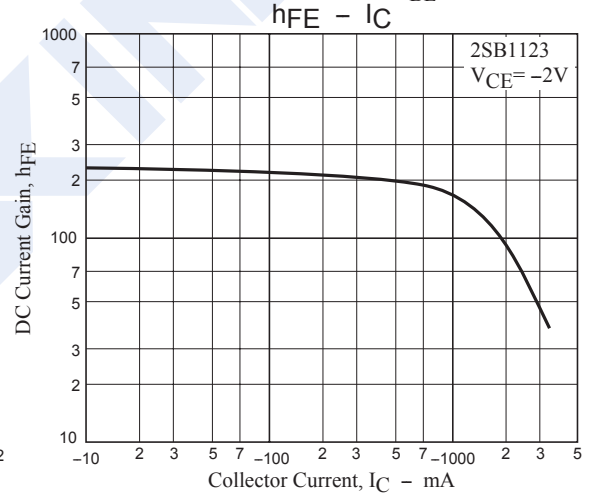
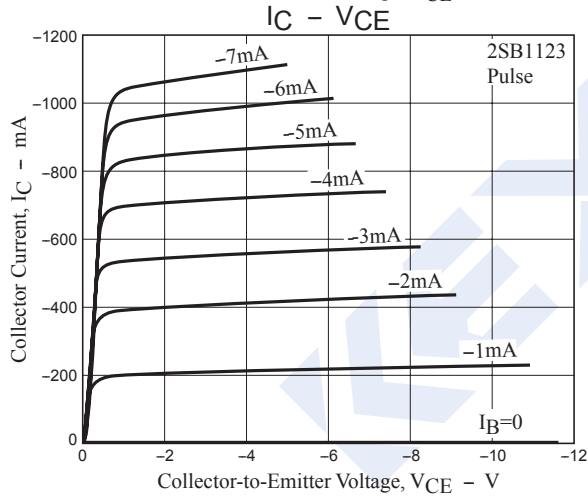
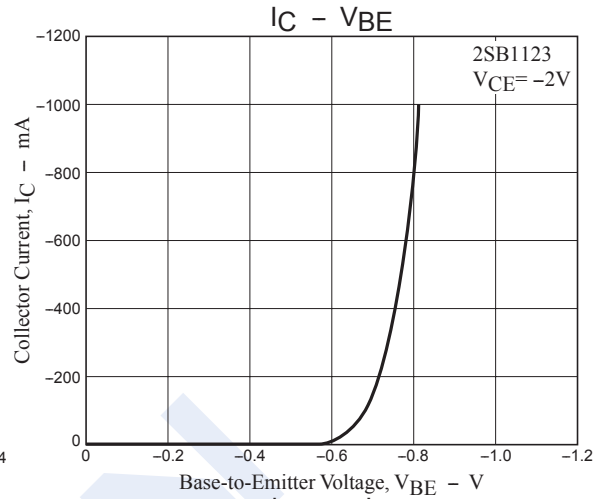
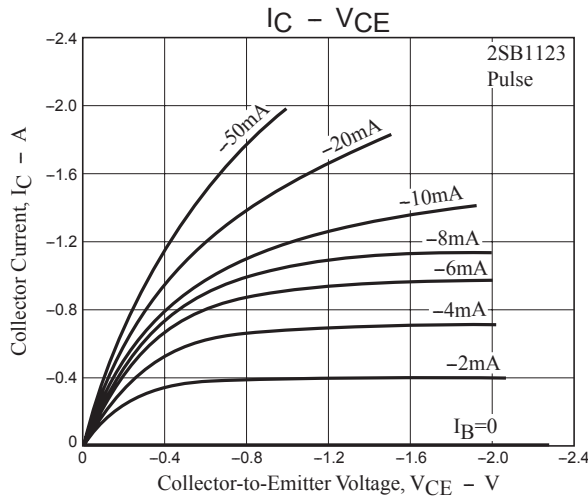
#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit	
Collector cutoff current	I <sub>CBO</sub>	V <sub>CB</sub> = -50V , I <sub>E</sub> = 0			-100	nA	
Emitter-base cutoff current	I <sub>EBO</sub>	V <sub>EB</sub> = -4 V , I <sub>C</sub> = 0			-100	nA	
DC current Gain	h <sub>FE</sub>	V <sub>CE</sub> = -2V , I <sub>C</sub> = -100mA	100		560		
Gain bandwidth product	f <sub>T</sub>	V <sub>CE</sub> = -10V , I <sub>C</sub> = -50mA		150		MHz	
Output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V , f = 1MHz		22		pF	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = -1A , I <sub>B</sub> = -50mA		-0.3	-0.7	V	
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = -1A , I <sub>B</sub> = -50mA		-0.9	-1.2	V	
Collector-to-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = -10μA , I <sub>E</sub> = 0	-60			V	
Collector-to-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> = -1mA , R <sub>BE</sub> = ∞	-50			V	
Emitter-to-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> = -10μA , I <sub>C</sub> = 0	-6			V	
Turn-ON Time	t <sub>on</sub>			60		ns	
Storage Time	t <sub>stg</sub>				450		ns
Fall Time	t <sub>f</sub>				30		ns

#### ■ hFE Classification

Marking	BF			
Rank	R	S	T	U
hFE	100~200	140~280	200~400	280~560

■ Typical Characteristics



■ Typical Characteristics

