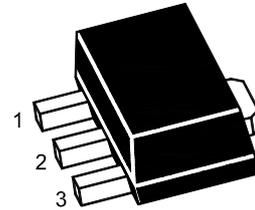


Plastic-Encapsulate Transistors

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

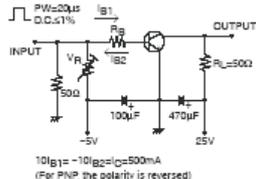


1.Base 2.Collector 3.Emitter
SOT-89 Plastic Package

■ Absolute Maximum Ratings Ta = 25°C

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

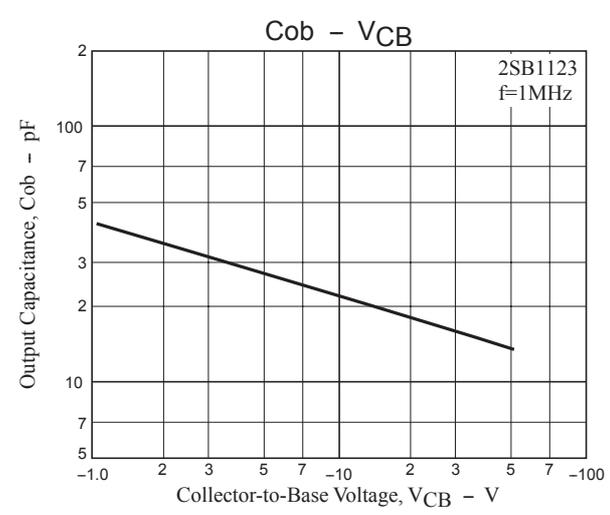
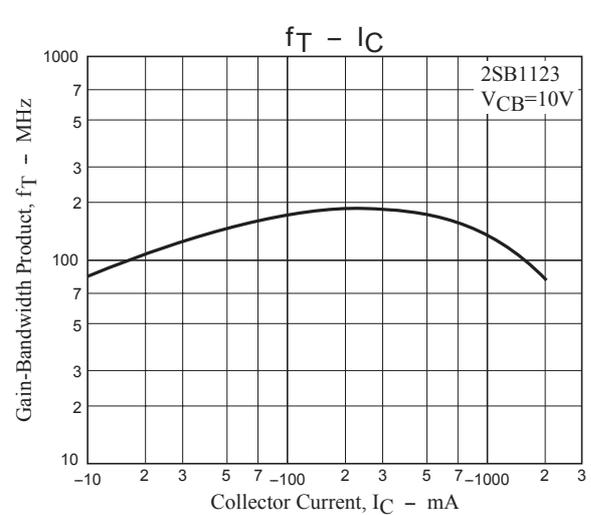
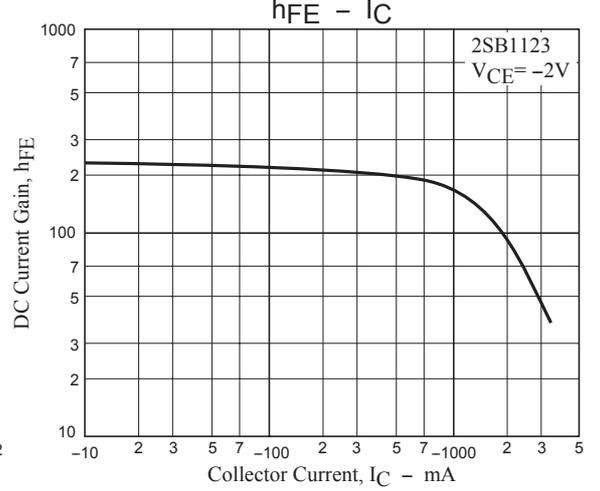
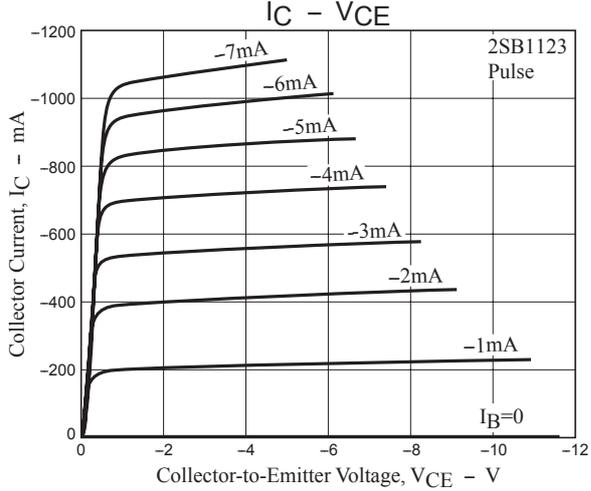
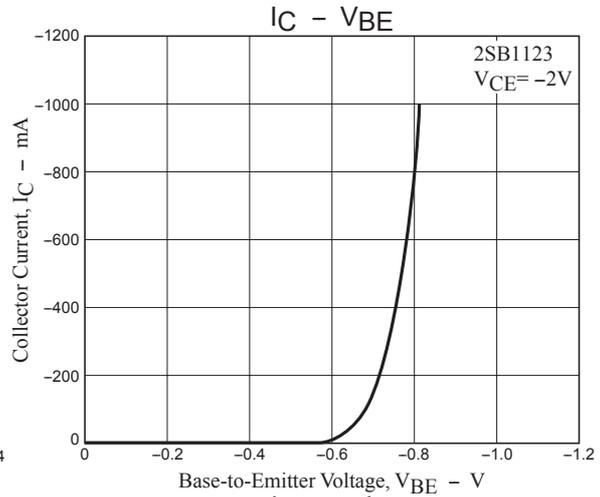
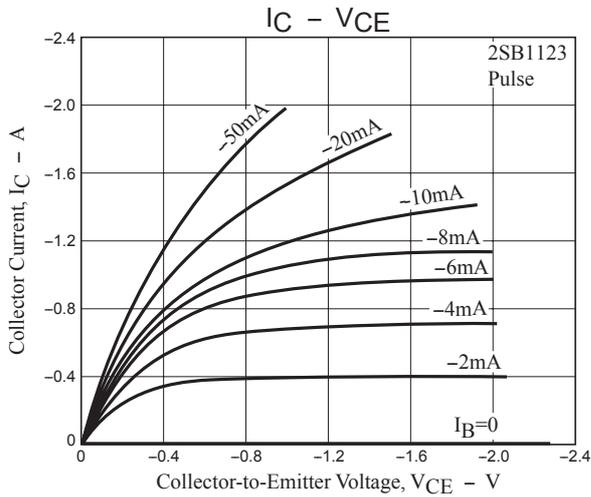
■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit	
Collector cutoff current	I _{CBO}	V _{CB} = -50V , I _E = 0			-100	nA	
Emitter-base cutoff current	I _{EBO}	V _{EB} = -4 V , I _C = 0			-100	nA	
DC current Gain	h _{FE}	V _{CE} = -2V , I _C = -100mA	100		560		
Gain bandwidth product	f _T	V _{CE} = -10V , I _C = -50mA		150		MHz	
Output capacitance	C _{ob}	V _{CB} = -10V , f = 1MHz		22		pF	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -1A , I _B = -50mA		-0.3	-0.7	V	
Base-emitter saturation voltage	V _{BE(sat)}	I _C = -1A , I _B = -50mA		-0.9	-1.2	V	
Collector-to-base breakdown voltage	V _{(BR)CBO}	I _C = -10μA , I _E = 0	-60			V	
Collector-to-emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA , R _{BE} = ∞	-50			V	
Emitter-to-base breakdown voltage	V _{(BR)EBO}	I _E = -10μA , I _C = 0	-6			V	
Turn-ON Time	t _{on}	 <p>10I_{B1} = -10I_{B2} (I_C = 500mA) (For PNP, the polarity is reversed)</p>		60		ns	
Storage Time	t _{stg}				450		ns
Fall Time	t _f				30		ns

■ hFE Classification

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

■ Typical Characteristics



■ Typical Characteristics

