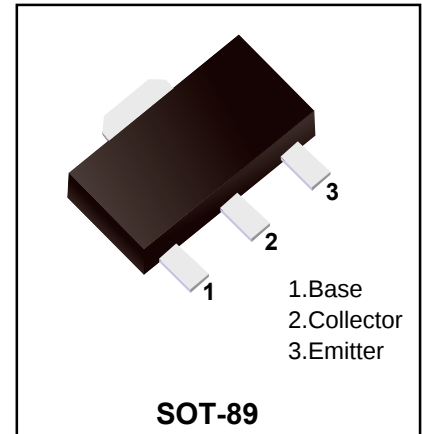


PNP Transistor

Features

- Low collector-to-emitter saturation voltage.
- Large current capacity and wide ASO.
- Fast switching speed.
- Complementary to 2SD1623



Absolute Maximum Rating (Ta=25°C)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CB0}	-60	V
Collector - Emitter Voltage	V _{CE0}	-50	
Emitter - Base Voltage	V _{EB0}	-6	
Collector Current - Continuous	I _C	-2	A
Collector current -Pulse	I _{CP}	-4	
Collector Power Dissipation (Note.1)	P _C	0.5	W
		1.3	
Junction Temperature	T _J	150	°C
Storage Temperature range	T _{stg}	-55 to 150	

Note 1: Mounted on ceramic board (250mm²×0.8mm)

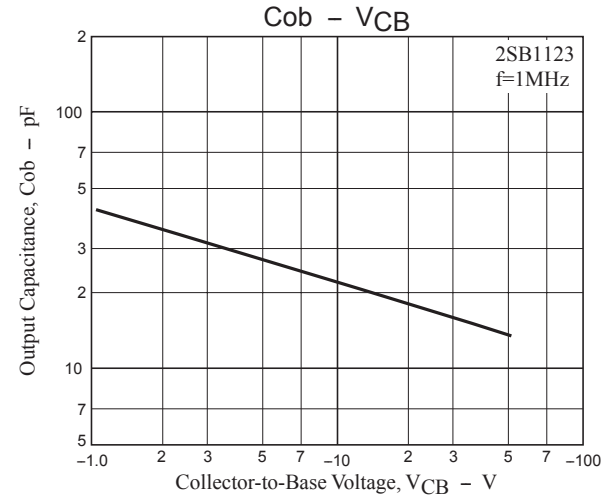
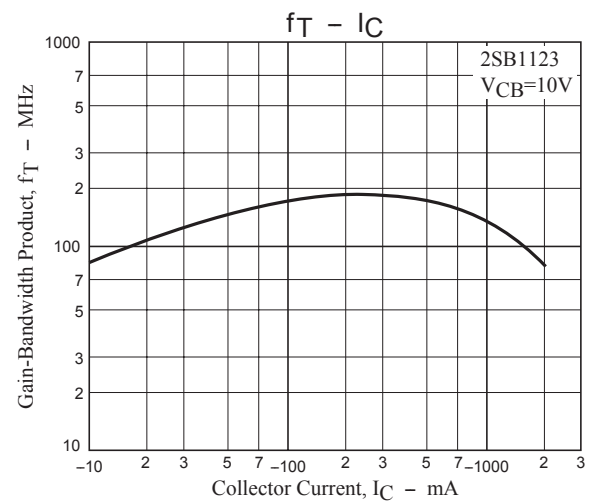
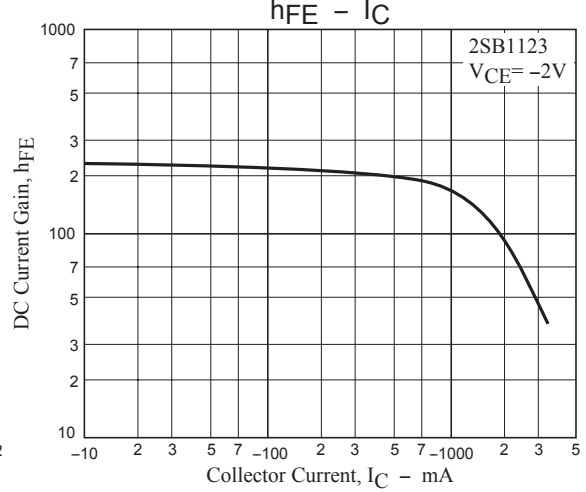
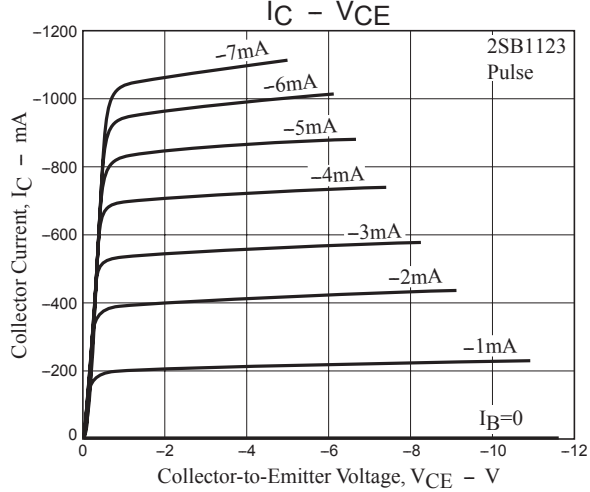
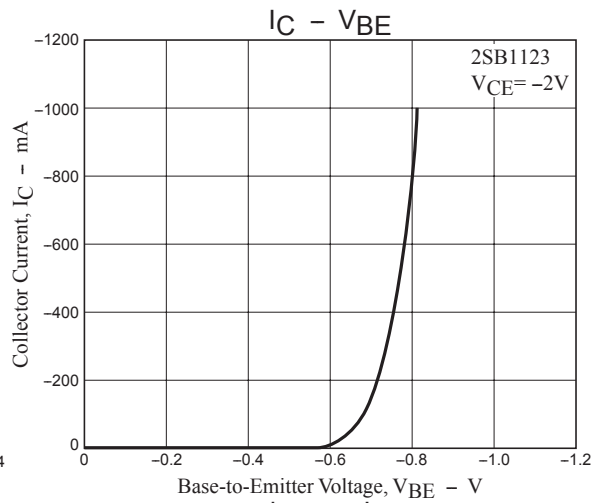
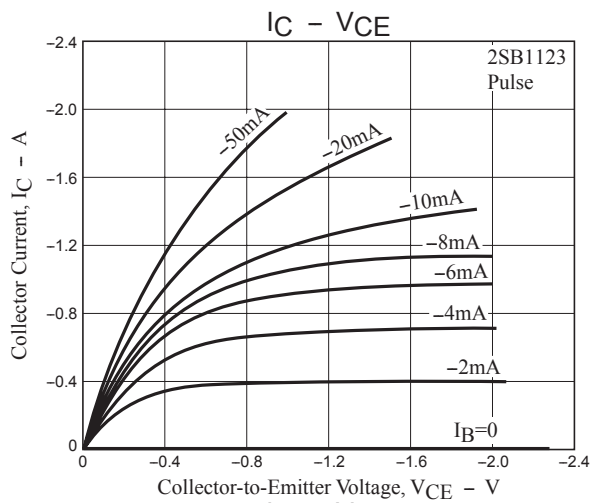
Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _C = -100 μA, I _E =0	-60			V
Collector- emitter breakdown voltage	V _{CE0}	I _C = -1 mA, R _{BE} =∞	-50			
Emitter - base breakdown voltage	V _{EB0}	I _E = -100 μA, I _C =0	-6			
Collector-base cut-off current	I _{CB0}	V _{CB} = -50V, I _E =0			-0.1	uA
Emitter cut-off current	I _{EB0}	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

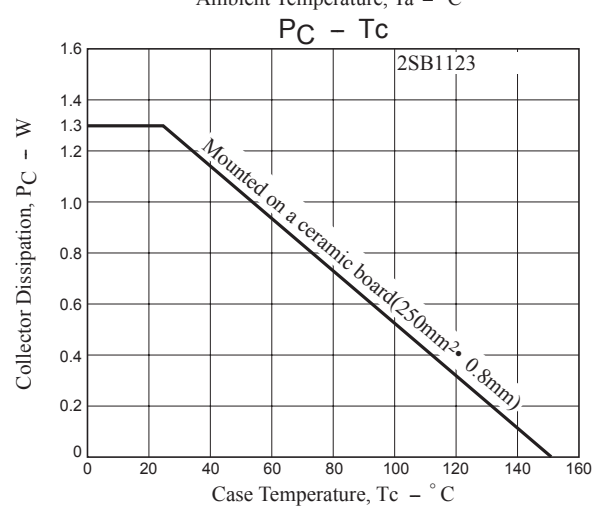
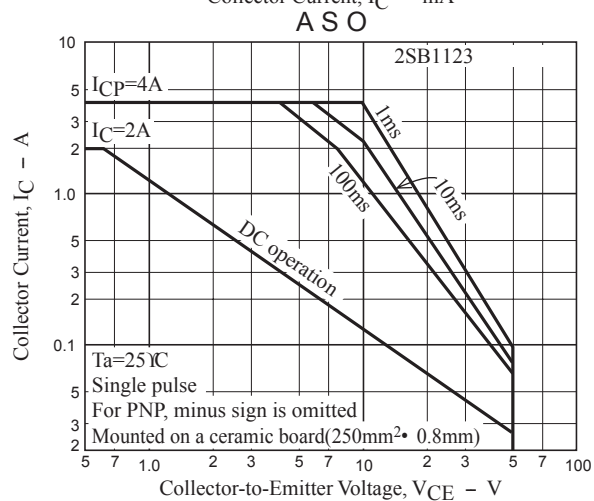
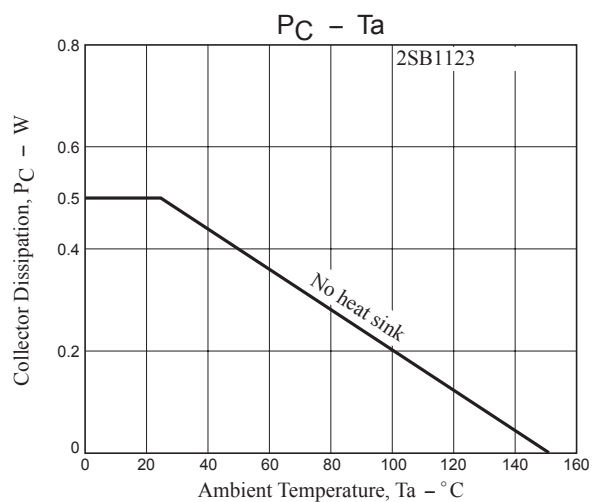
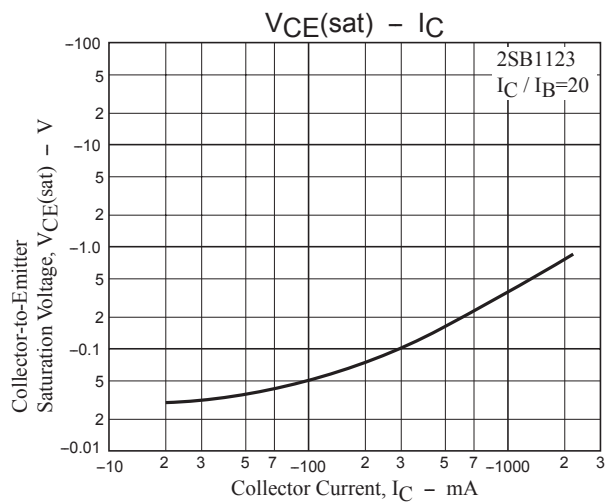
h_{FE} Classification

Type	2SB1123-R	2SB1123-S	2SB1123-T	2SB1123-U
Range	100-200	140-280	200-400	280-560
Marking	BF R*	BF S*	BF T*	BF U*

Typical Characteristics



Typical Characteristics



Ordering information

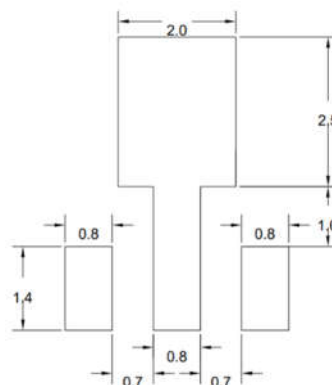
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel, 7" reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

Package Dimensions

SOT-89

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.40	1.60	0.055	0.063
b	0.32	0.52	0.013	0.020
b1	0.38	0.58	0.015	0.023
c	0.35	0.45	0.014	0.018
D	4.40	4.60	0.173	0.181
D1	1.45	1.65	0.057	0.065
D2	1.70	1.80	0.067	0.071
E	2.30	2.60	0.091	0.102
E1	3.95	4.25	0.156	0.167
E2	1.80	2.00	0.071	0.079
e	1.40	1.60	0.055	0.063
e1	2.80	3.20	0.110	0.126
L	0.90	1.20	0.035	0.047

The recommended mounting pad size



UNIT:MM

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