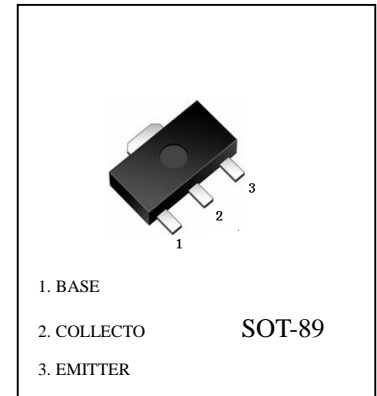


**FEATURES**

- Low collector saturation voltage,
- Excellent current-to-gain characteristics

**2SB1386 (PNP)**

**Maximum Ratings (Ta=25 °C unless otherwise noted)**

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V <sub>CBO</sub>	-30	V
Collector-Emitter Voltage	V <sub>CEO</sub>	-20	V
Emitter-Base Voltage	V <sub>EBO</sub>	-6	V
Collector Current -Continuous	I <sub>C</sub>	-5	A
Collector Power dissipation	P <sub>C</sub>	0.5	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55to +150	°C

**ELECTRICAL CHARACTERISTICS ( @ Ta=25 °C unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>CBO</sub>	I <sub>C</sub> =-50μA, I <sub>E</sub> =0	-30			V
Collector-emitter breakdown voltage	V <sub>CEO</sub>	I <sub>C</sub> =-1mA, I <sub>B</sub> =0	-20			V
Emitter-base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> =-50μA, I <sub>C</sub> =0	-6			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =-20V, I <sub>E</sub> =0			-0.5	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =-5V, I <sub>C</sub> =0			-0.5	μA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =-2V, I <sub>C</sub> =-500mA	82		390	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-4A, I <sub>B</sub> =-100mA			-1	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =-6V, I <sub>C</sub> =-50mA, f=30MHz		120		MHz
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =-20V, I <sub>E</sub> =0, f=1MHz		60		pF

**CLASSIFICATION OF h<sub>FE</sub>**

Rank	P	Q	R
Range	82-180	120-270	180-390
Marking	BHP	BHQ	BHR

2SB1386 Typical Characteristics

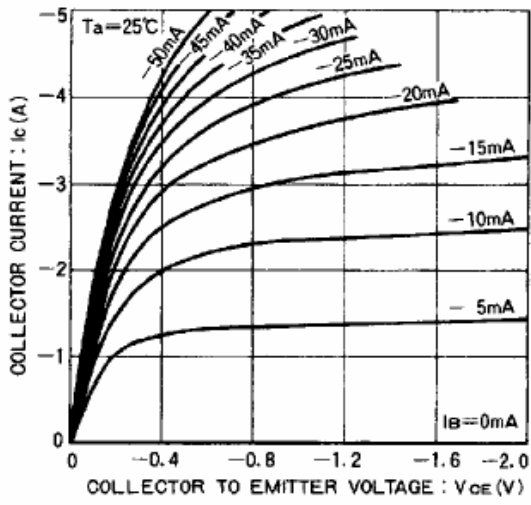


Figure 1

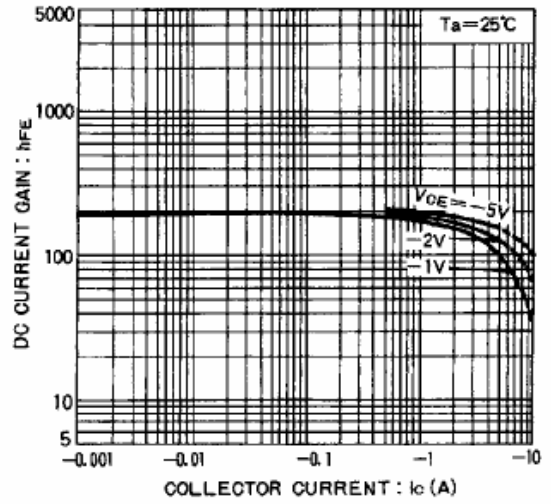


Figure 2

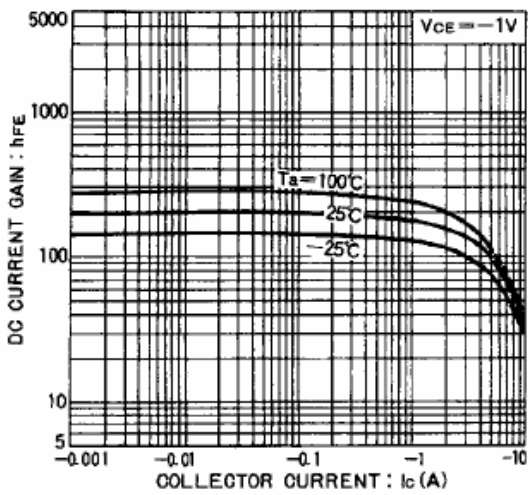


Figure 3

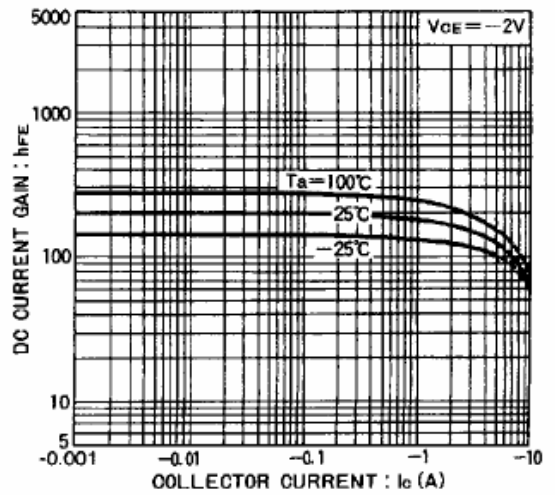


Figure 4