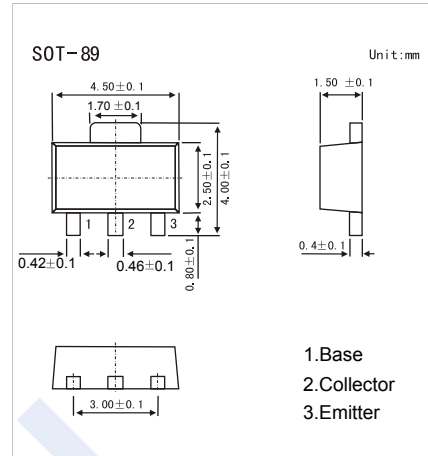


PNP Transistors

2SB1396-HF

■ Features

- Low collector to emitter saturation voltage
- Large current capacity
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-15	V
Collector - Emitter Voltage	V_{CE0}	-10	
Emitter - Base Voltage	V_{EB0}	-7	
Collector Current - Continuous	I_C	-3	A
Collector Current - Pulse	I_{CP}	-5	
Collector Power Dissipation	P_C	1.3	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CB0}	$I_C = -100 \mu\text{A}$, $I_E = 0$	-15			V
Collector-emitter breakdown voltage	V_{CE0}	$I_C = -1 \text{ mA}$, $R_{BE} = \infty$	-10			
Emitter-base breakdown voltage	V_{EB0}	$I_E = -100 \mu\text{A}$, $I_C = 0$	-7			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -12\text{V}$, $I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -6\text{V}$, $I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1.5 \text{ A}$, $I_B = -30 \text{ mA}$		-0.22	-0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -1.5 \text{ A}$, $I_B = -30 \text{ mA}$		-0.9	-1.2	
DC current gain	h_{FE}	$V_{CE} = -2\text{V}$, $I_C = -500 \text{ mA}$	140		560	
		$V_{CE} = -2\text{V}$, $I_C = -3 \text{ A}$	70			
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$		26		pF
Transition frequency	f_T	$V_{CE} = -2\text{V}$, $I_C = -300 \text{ mA}$		400		MHz

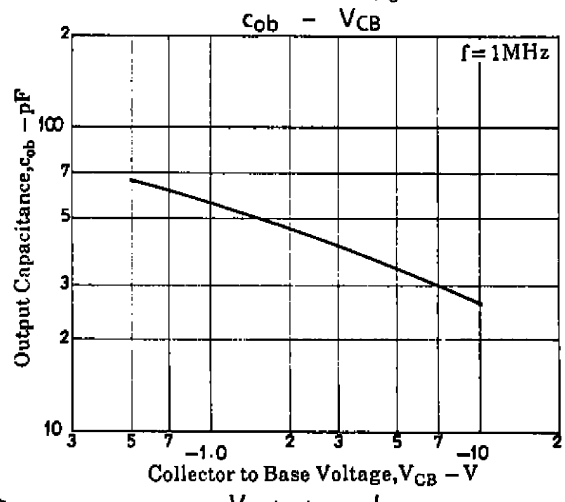
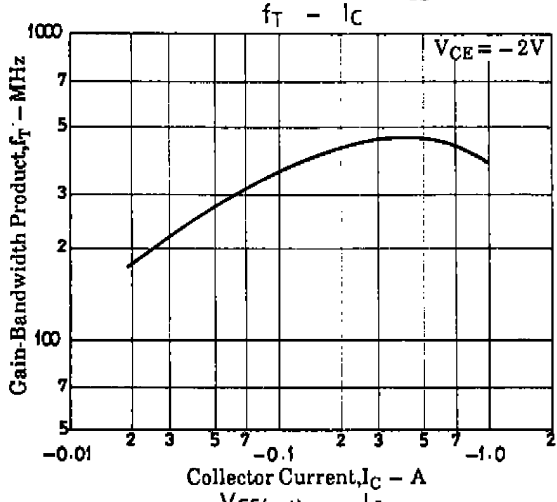
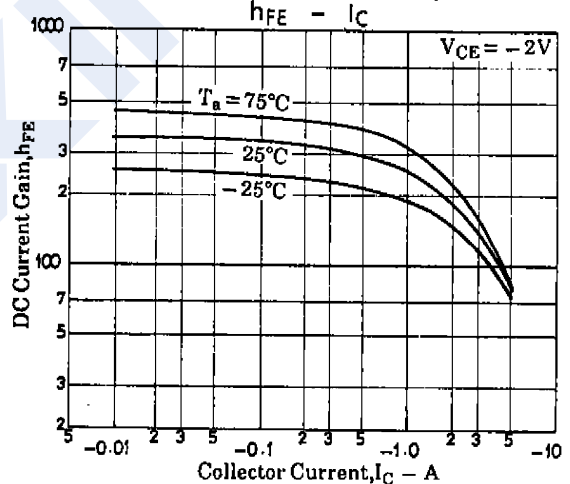
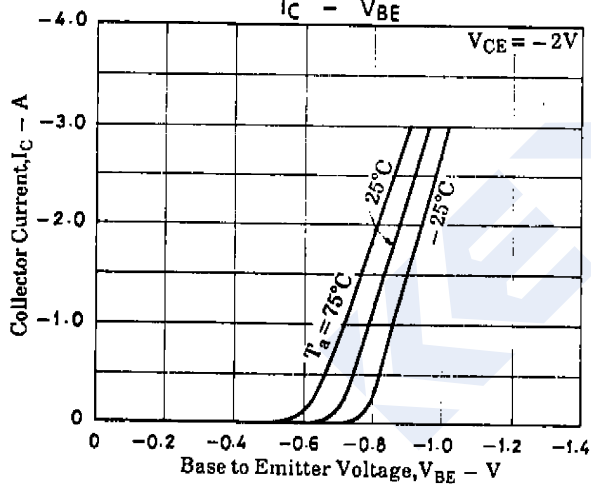
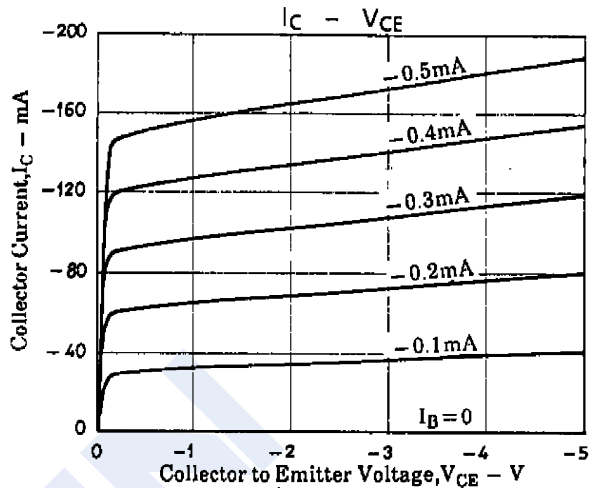
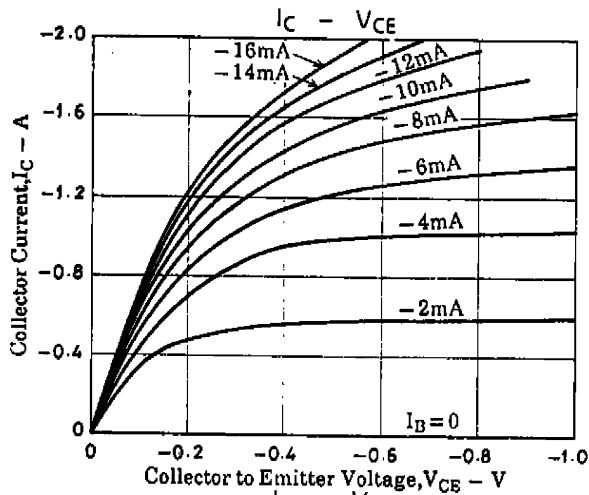
■ Classification of $h_{FE}(1)$

Type	2SB1396-S-HF	2SB1396-T-HF	2SB1396-U-HF
Range	140-280	200-400	280-560
Marking	BO S* _F	BO T* _F	BO U* _F

PNP Transistors

2SB1396-HF

■ Typical Characteristics



PNP Transistors

2SB1396-HF

■ Typical Characteristics

