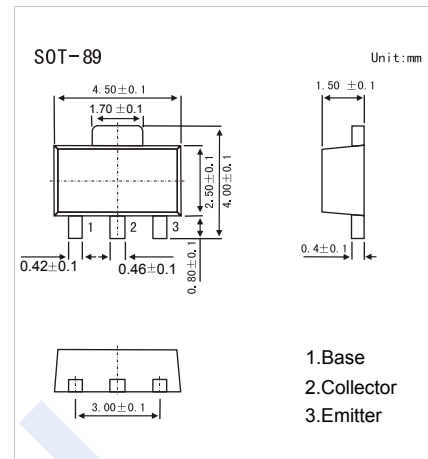


## PNP Transistors

### 2SB1396

#### ■ Features

- Low collector to emitter saturation voltage
- Large current capacity



#### ■ 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	$\mu\text{A}$
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

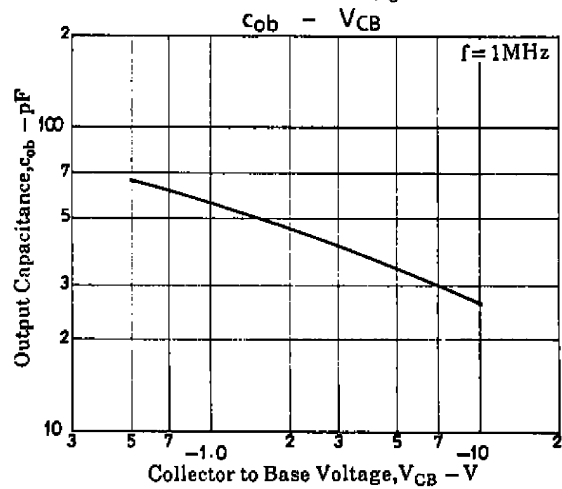
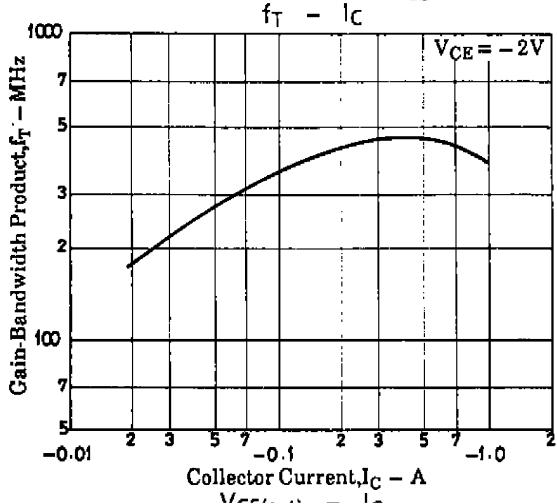
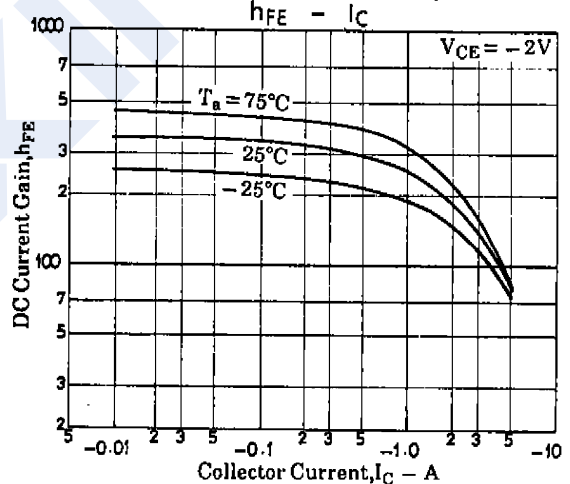
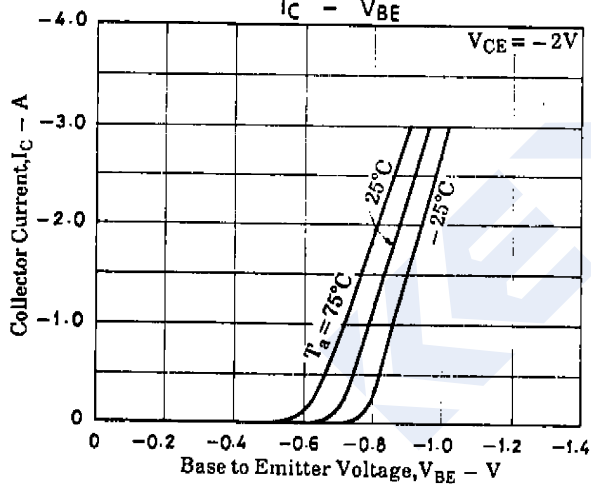
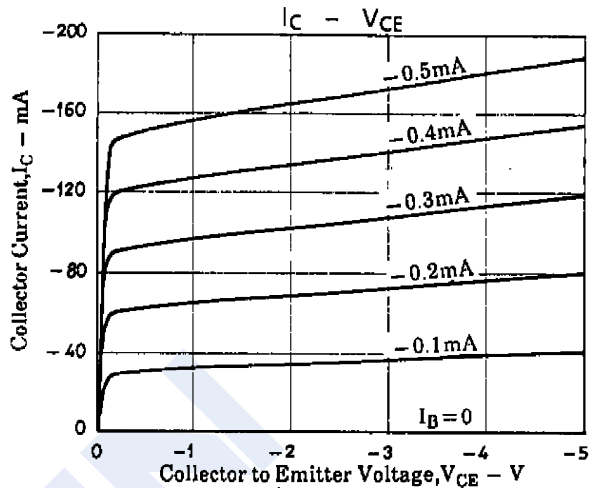
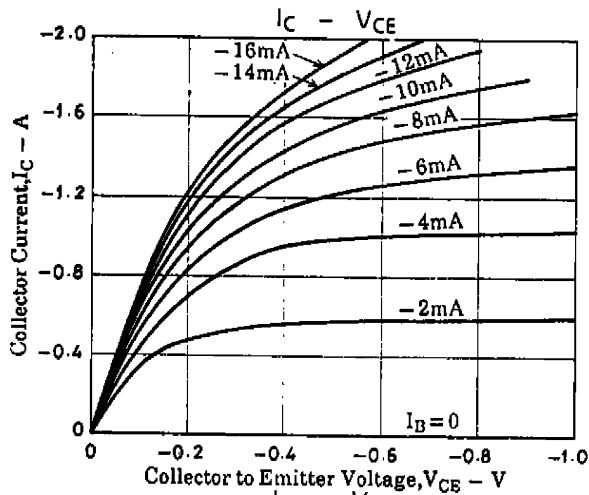
#### ■ Classification of $h_{fe}(1)$

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

PNP Transistors

2SB1396

■ Typical Characteristics



### PNP Transistors

### 2SB1396

■ Typical Characteristics

