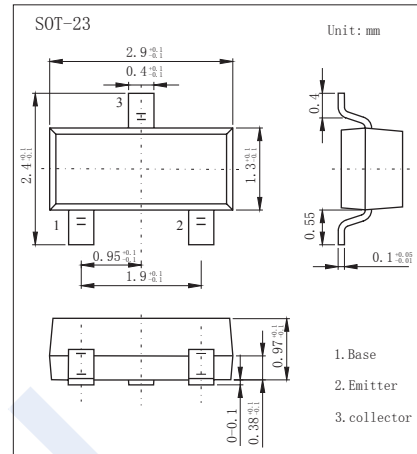


PNP Transistors

2SB736

■ Features

- High DC current gain h_{FE} :200(TYP)
- Complimentary to 2SD780.

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-60	V
Collector - Emitter Voltage	V_{CEO}	-60	
Emitter - Base Voltage	V_{EBO}	-5	
Collector Current - Continuous	I_C	-300	mA
Collector Power Dissipation	P_C	200	mW
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_{CBO}	$I_C = -100 \mu\text{A}, I_E = 0$	-60			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = -1 \text{ mA}, I_B = 0$	-60			
Emitter - base breakdown voltage	V_{EBO}	$I_E = -100 \mu\text{A}, I_C = 0$	-5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -50\text{V}, I_E = 0$			-0.1	uA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$			-0.1	
Collector-emitter saturation voltage (Note.1)	$V_{CE(sat)}$	$I_C = -300 \text{ mA}, I_B = -30 \text{ mA}$		-0.35	-0.6	V
Base - emitter saturation voltage (Note.1)	$V_{BE(sat)}$	$I_C = -300 \text{ mA}, I_B = -30 \text{ mA}$			-1.2	
Base - emitter voltage (Note.1)	V_{BE}	$V_{CE} = -6\text{V}, I_C = -10 \text{ mA}$	-600	-660	-700	mV
DC current gain (Note.1)	h_{FE}	$V_{CE} = -1 \text{ V}, I_C = -50 \text{ mA}$	110	200	400	
		$V_{CE} = -2\text{V}, I_C = -300 \text{ mA}$	30			
Collector output capacitance	C_{ob}	$V_{CB} = -6\text{V}, I_E = 0, f = 1 \text{ MHz}$		13		pF
Transition frequency	f_T	$V_{CE} = -6\text{V}, I_E = 10 \text{ mA}$		100		MHz

Note.1: Pulse test : Pulse width $\leq 350 \mu\text{s}$, Duty Cycle $\leq 2\%$.

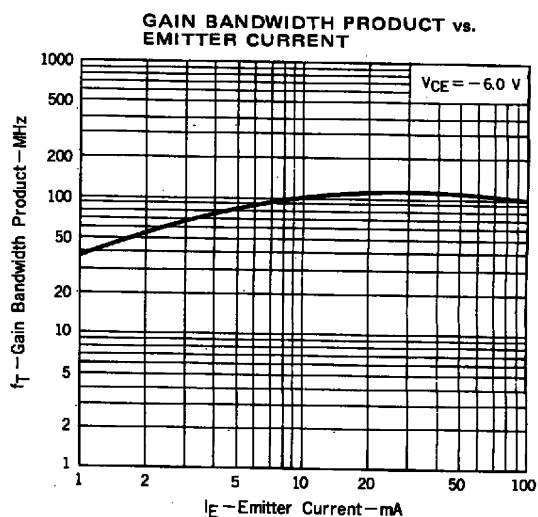
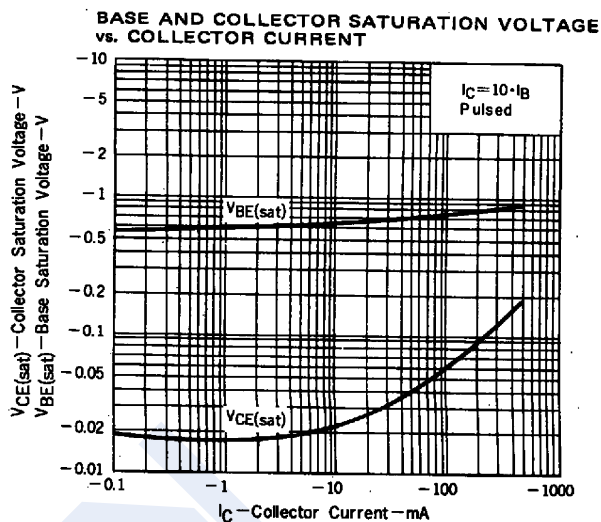
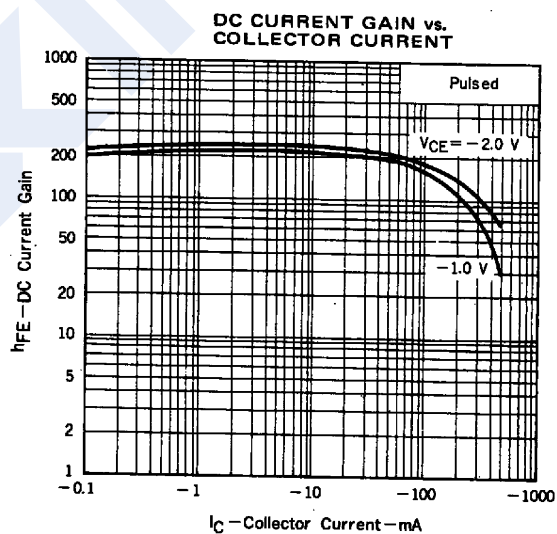
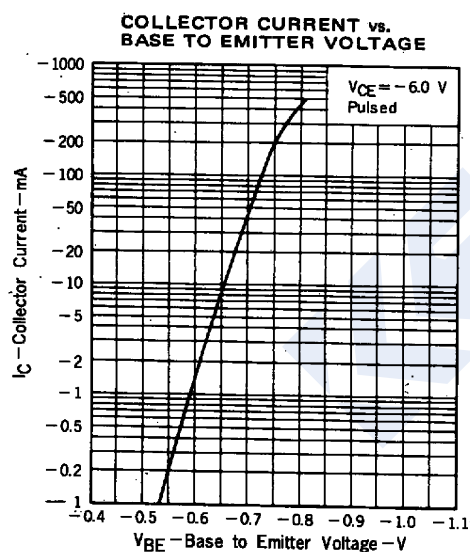
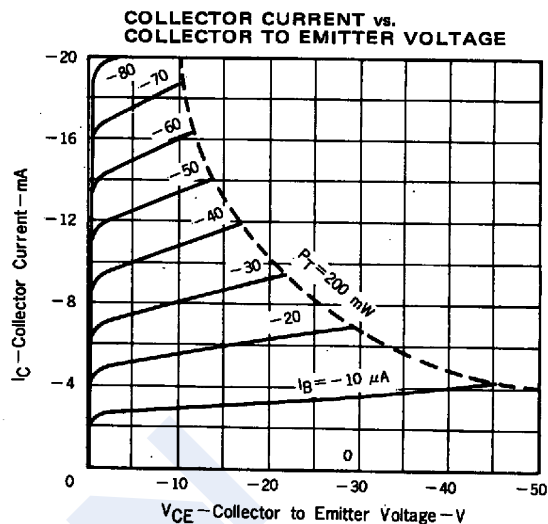
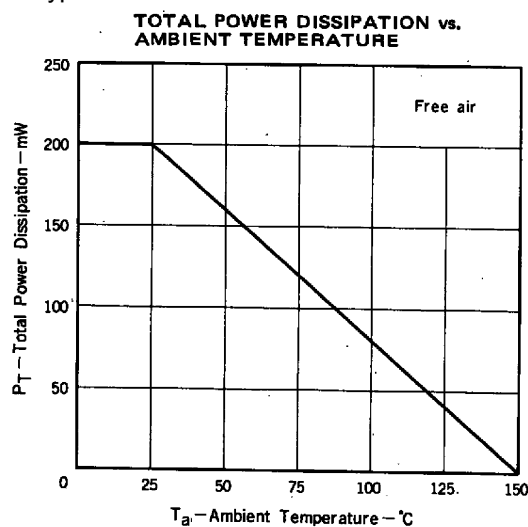
■ Classification of $h_{FE}(1)$

Type	2SB736-BW1	2SB736-BW2	2SB736-BW3	2SB736-BW4	2SB736-BW5
Range	110-180	135-220	170-270	200-320	250-400
Marking	BW1	BW2	BW3	BW4	BW5

PNP Transistors

2SB736

■ Typical Characteristics



PNP Transistors

2SB736

■ Typical Characteristics

