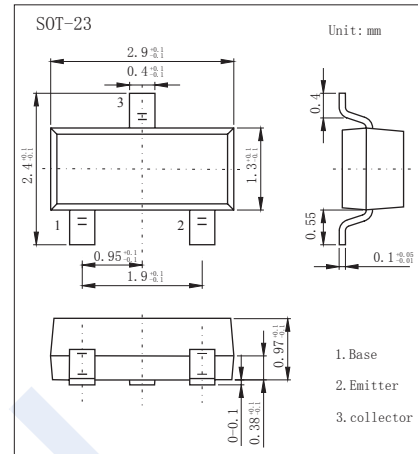


PNP Transistors

2SB736A

■ Features

- High DC current gain h_{FE} :200(TYP)
- Complimentary to 2SD780A.

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-80	V
Collector - Emitter Voltage	V_{CE0}	-80	
Emitter - Base Voltage	V_{EB0}	-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_{CB0}	$I_C = -100 \mu\text{A}$, $I_E = 0$	-80			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -1 \text{ mA}$, $I_B = 0$	-80			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu\text{A}$, $I_C = 0$	-5			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -70\text{V}$, $I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = -5\text{V}$, $I_C = 0$			-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 $\leq 2\%$.

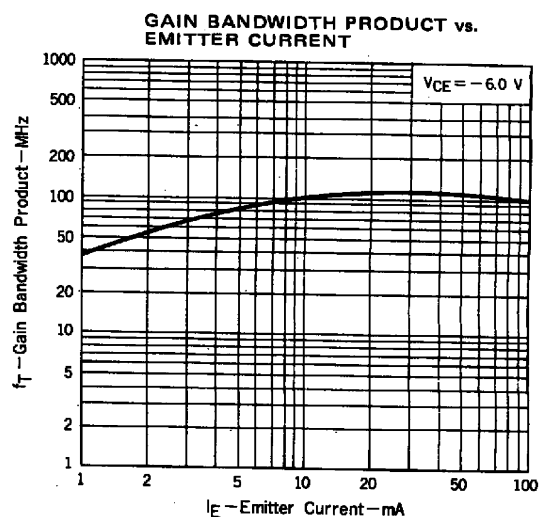
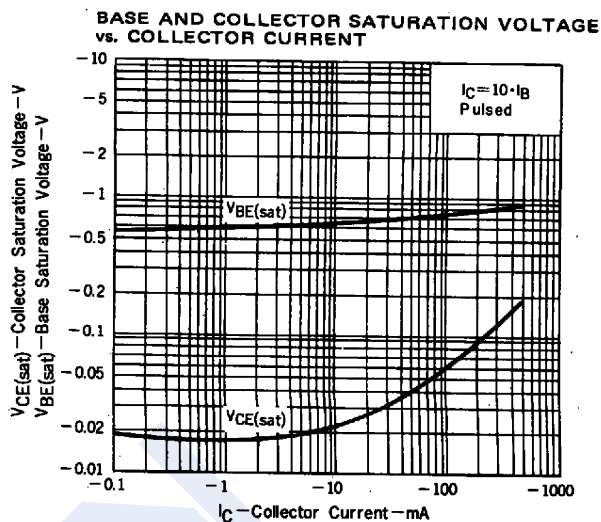
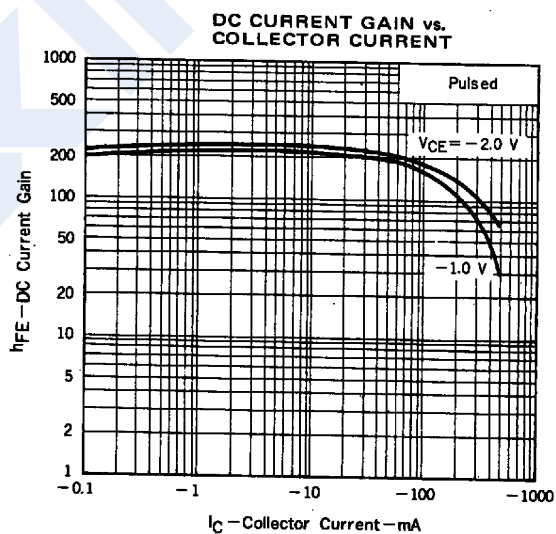
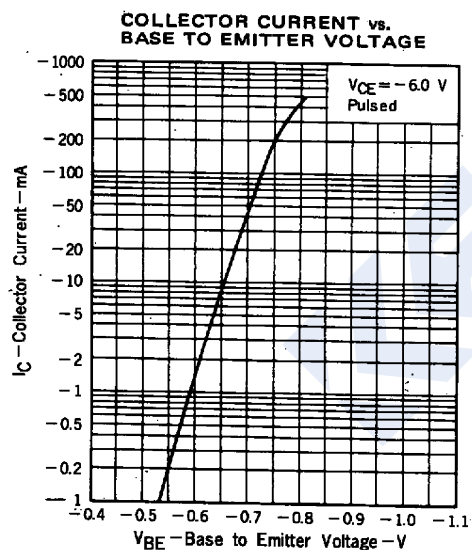
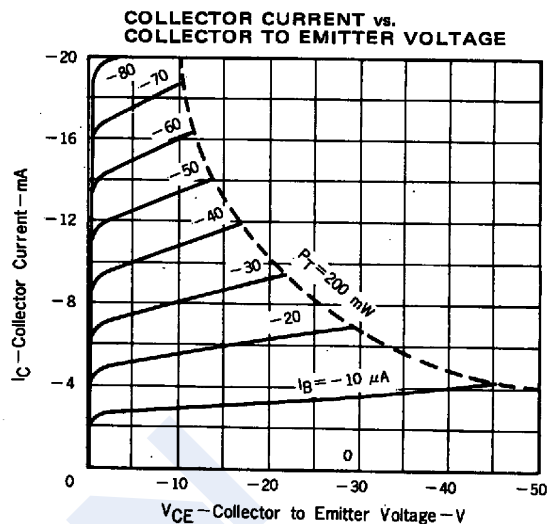
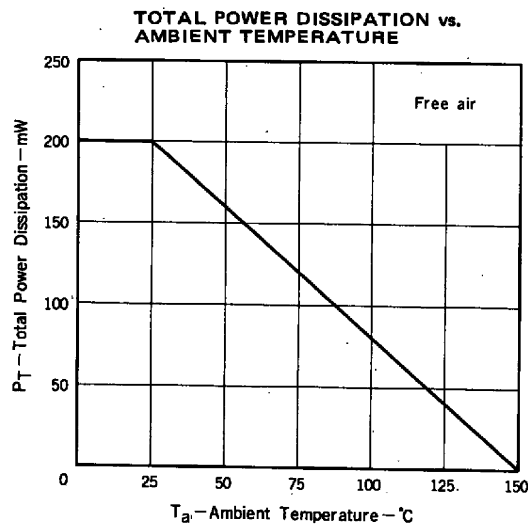
■ Classification of $h_{FE}(1)$

Type	2SB736A-B51	2SB736A-B52	2SB736A-B53	2SB736A-B54	2SB736A-B55
Range	110-180	135-220	170-270	200-320	250-400
Marking	B51	B52	B53	B54	B55

PNP Transistors

2SB736A

■ Typical Characteristics



PNP Transistors

2SB736A

■ Typical Characteristics

