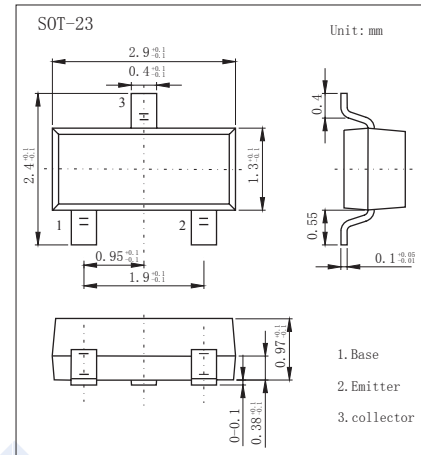


PNP Transistors

2SA811A

■ Features

- Collector Current Capability $I_c = -50\text{mA}$
- Collector Emitter Voltage $V_{CE0} = -120\text{V}$



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-120	V
Collector - Emitter Voltage	V_{CE0}	-120	
Emitter - Base Voltage	V_{EB0}	-5	
Collector Current - Continuous	I_c	-50	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}	$I_c = -100\ \mu\text{A}, I_E = 0$	-120			V
Collector- emitter breakdown voltage	V_{CE0}	$I_c = -1\ \text{mA}, I_B = 0$	-120			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100\ \mu\text{A}, I_c = 0$	-5			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -120\ \text{V}, I_E = 0$			-50	nA
Emitter cut-off current	I_{EB0}	$V_{EB} = -5\ \text{V}, I_c = 0$			-50	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = -10\ \text{mA}, I_B = -1\ \text{mA}$			-0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c = -10\ \text{mA}, I_B = -1\ \text{mA}$			-1.2	
Base - emitter voltage	V_{BE}	$V_{CE} = -6\ \text{V}, I_c = -1\ \text{mA}$	-0.55		-0.65	
DC current gain	$h_{FE(1)}$	$V_{CE} = -6\ \text{V}, I_c = -0.1\ \text{mA}$	100			
	$h_{FE(2)}$	$V_{CE} = -6\ \text{V}, I_c = -1\ \text{mA}$	135		900	
Collector output capacitance	C_{ob}	$V_{CB} = -30\ \text{V}, I_E = 0, f = 1\ \text{MHz}$			3	pF
Transition frequency	f_T	$V_{CE} = -6\ \text{V}, I_E = 1\ \text{mA}$	50			MHz

Note. Pulsed PW $\leq 350\ \mu\text{s}$, Duty Cycle $\leq 2\%$

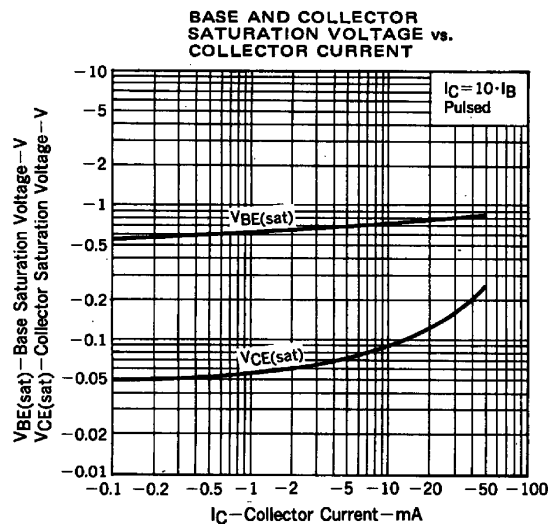
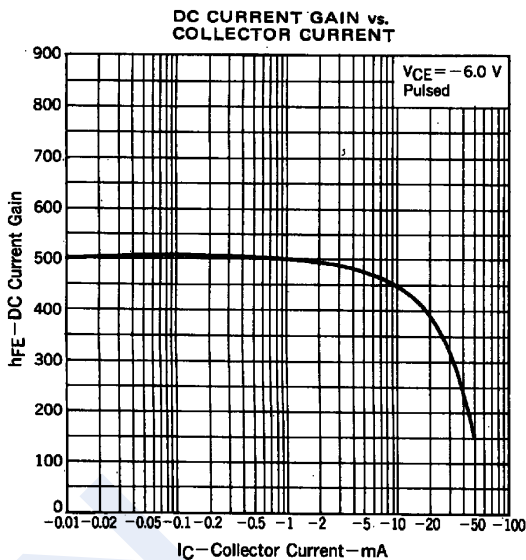
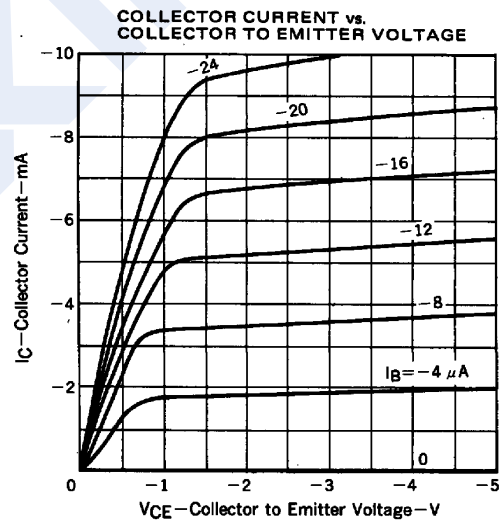
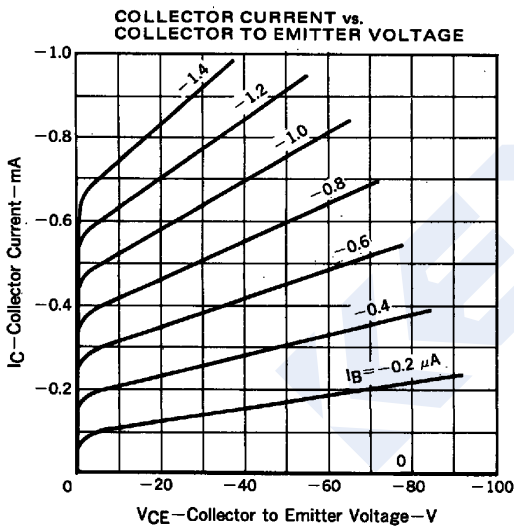
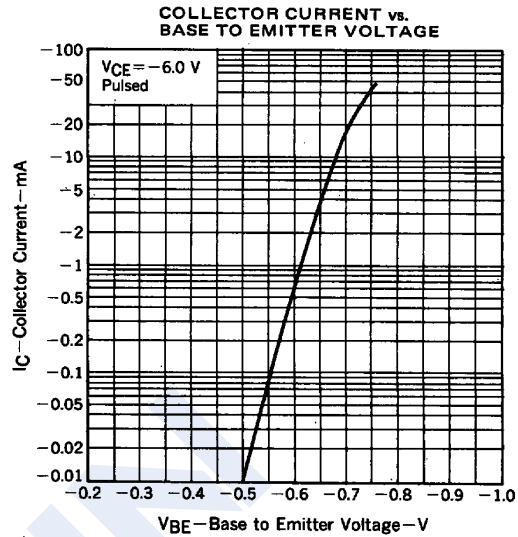
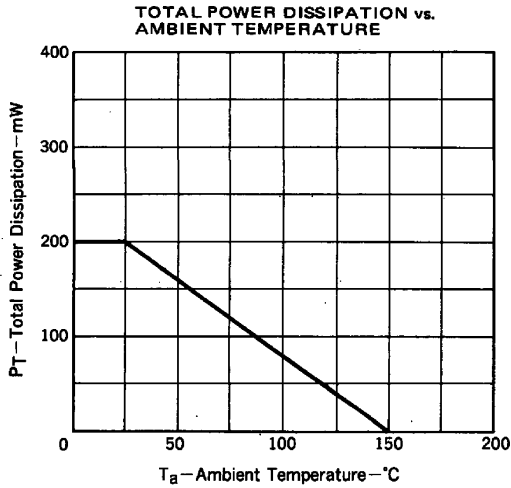
■ Classification of $h_{FE(2)}$

Type	2SA811A-C15	2SA811A-C16	2SA811A-C17	2SA811A-C18
Range	135-270	200-400	300-600	450-900
Marking	C15	C16	C17	C18

PNP Transistors

2SA811A

Typical Characteristics



PNP Transistors

2SA811A

■ Typical Characteristics

