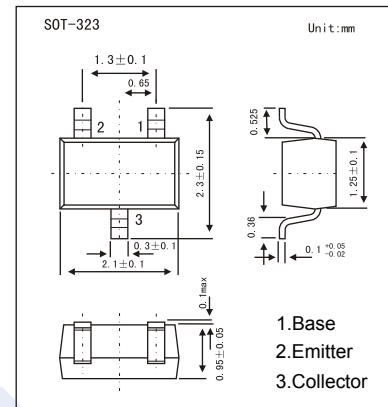


## PNP Transistors

### 2SA1612

#### ■ Features

- High DC Current Gain
- Complementary to 2SC4180



#### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V <sub>CB0</sub>	-120	V
Collector - Emitter Voltage	V <sub>CEO</sub>	-120	
Emitter - Base Voltage	V <sub>EBO</sub>	-5	
Collector Current - Continuous	I <sub>C</sub>	-50	mA
Collector Power Dissipation	P <sub>C</sub>	150	mW
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature range	T <sub>stg</sub>	-55 to 150	

#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V <sub>CB0</sub>	I <sub>C</sub> = -100 μA, I <sub>E</sub> =0	-120			V
Collector- emitter breakdown voltage	V <sub>CEO</sub>	I <sub>C</sub> = -1 mA, I <sub>B</sub> =0	-120			
Emitter - base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> = -100 μA, I <sub>C</sub> =0	-5			
Collector-base cut-off current	I <sub>CB0</sub>	V <sub>CB</sub> = -120 V, I <sub>E</sub> =0			-0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = -5V, I <sub>C</sub> =0			-0.1	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-10 mA, I <sub>B</sub> =-1 mA		-0.09	-0.3	V
Base - emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =-10 mA, I <sub>B</sub> =-1 mA			-1.2	
Base - emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> = -6V, I <sub>C</sub> = -1mA	-0.55	-0.61	-0.65	
DC current gain	h <sub>FE(1)</sub>	V <sub>CE</sub> = -6V, I <sub>C</sub> = -0.1mA (Note.1)	100	500		
	h <sub>FE(2)</sub>	V <sub>CE</sub> = -6V, I <sub>C</sub> = -1mA	135	500	900	
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -30V, I <sub>E</sub> =0, f=1MHz		2	3	pF
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = -6V, I <sub>C</sub> = -1mA	50	90		MHz

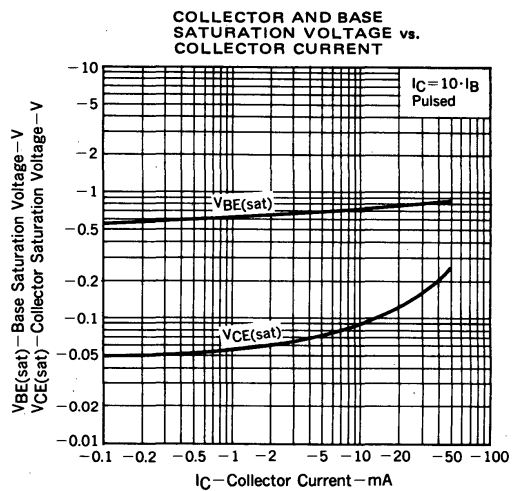
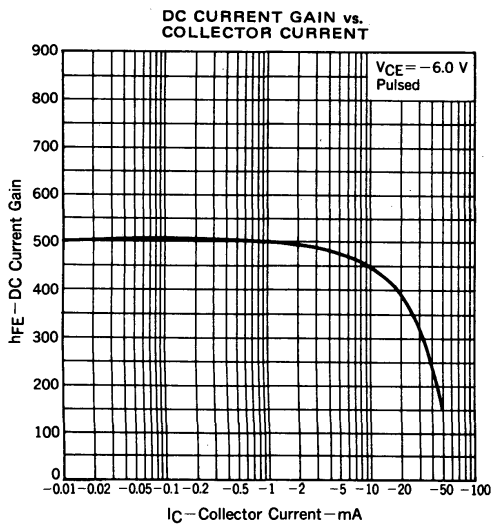
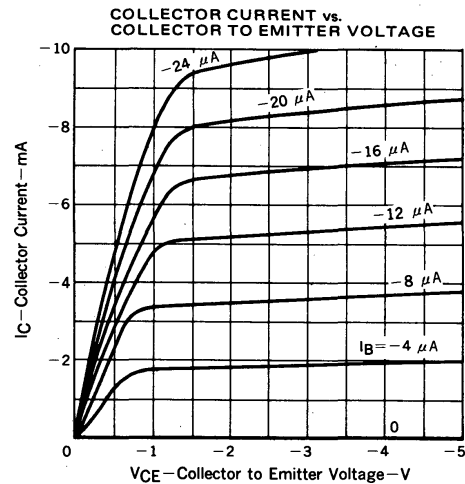
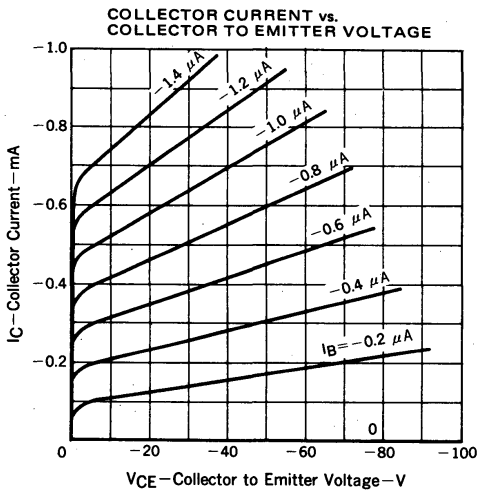
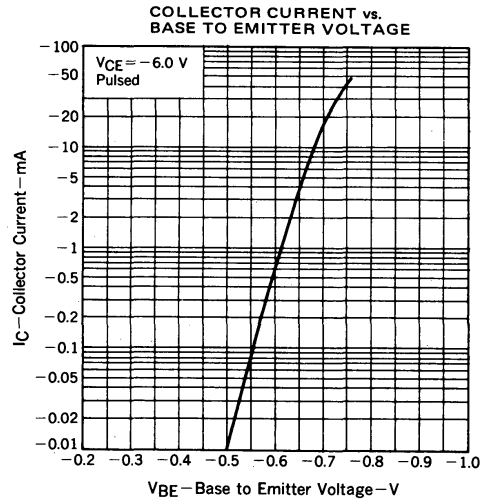
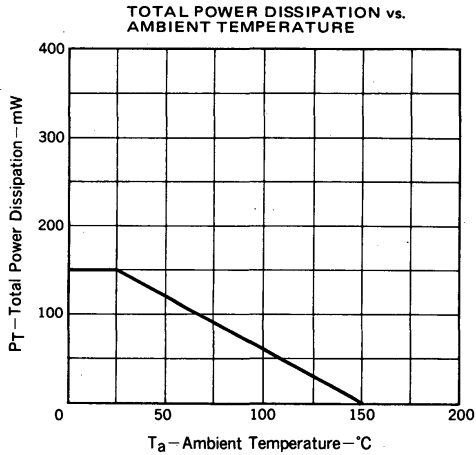
#### ■ Classification of h<sub>FE(2)</sub>

Type	2SA1612-C15	2SA1612-C16	2SA1612-C17	2SA1612-C18
Range	135-270	200-400	300-600	450-900
Marking	C15	C16	C17	C18

# PNP Transistors

## 2SA1612

■ Typical Characteristics



## PNP Transistors

## 2SA1612

## ■ Typical Characteristics

