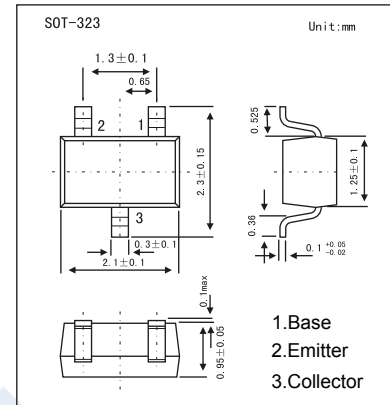


## PNP Transistors

### 2SA1608

#### ■ Features

- High fr : fr=400MHz
- Complementary to 2SC3739



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V <sub>CB0</sub>	-60	V
Collector - Emitter Voltage	V <sub>CE0</sub>	-40	
Emitter - Base Voltage	V <sub>EB0</sub>	-5	
Collector Current - Continuous	I <sub>C</sub>	-500	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	-60			V
Collector- emitter breakdown voltage	V <sub>CE0</sub>	I <sub>C</sub> = -1 mA, I <sub>B</sub> =0	-40			
Emitter - base breakdown voltage	V <sub>EB0</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> = -40 V, I <sub>E</sub> =0			-0.1	μA
Emitter cut-off current	I <sub>EB0</sub>	V <sub>EB</sub> = -4V, I <sub>C</sub> =0			-0.1	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-500 mA, I <sub>B</sub> =-50 mA		-0.45	-0.75	V
Base - emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =-500 mA, I <sub>B</sub> =-50 mA		-1	-1.3	
DC current gain (Note.1)	h <sub>FE(1)</sub>	V <sub>CE</sub> = -2V, I <sub>C</sub> = -150mA	75	140	300	
	h <sub>FE(2)</sub>	V <sub>CE</sub> = -2V, I <sub>C</sub> = -500mA	20	50		
Turn-on time	t <sub>on</sub>	V <sub>CC</sub> =-30V, I <sub>C</sub> =-150mA, I <sub>B1</sub> =-I <sub>B2</sub> =-15mA		25		ns
Storage time	t <sub>stg</sub>			70		
Turn-off time	t <sub>off</sub>			100		
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V, I <sub>E</sub> =0, f=1MHz		5	8	pF
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = -10V, I <sub>C</sub> = -20mA	150	400		MHz

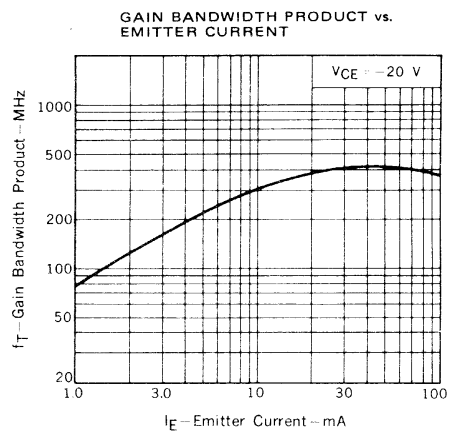
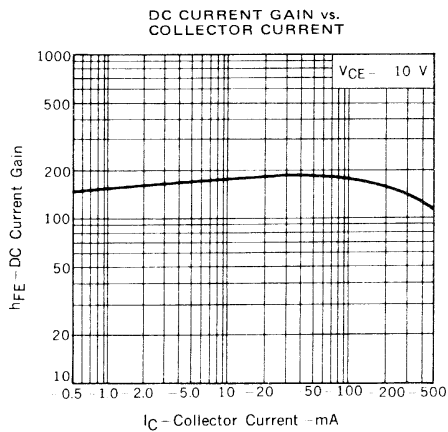
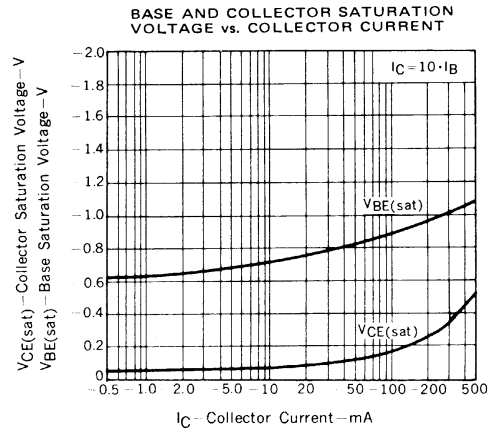
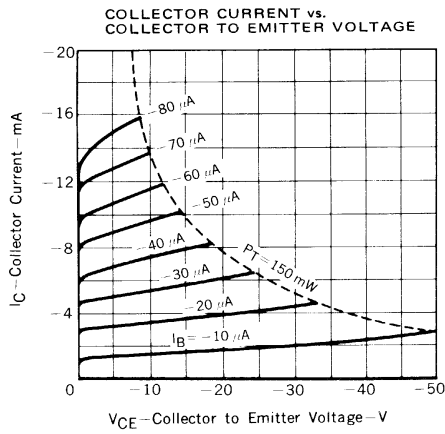
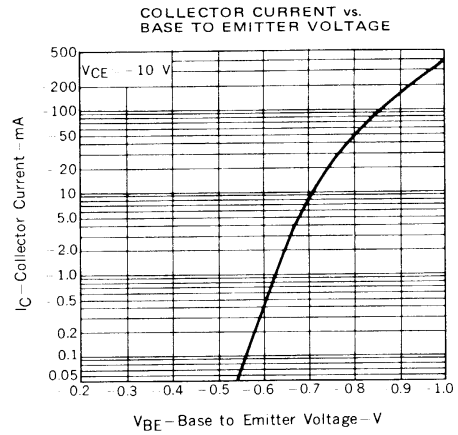
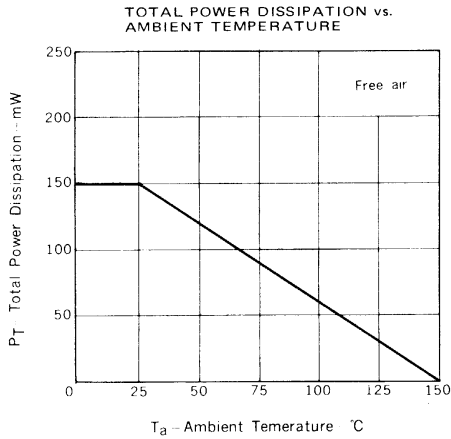
#### ■ Classification of h<sub>fe</sub> (1)

Type	2SA1608-Y12	2SA1608-Y13	2SA1608-Y14
Range	75-150	100-200	150-300
Marking	Y12	Y13	Y14

# PNP Transistors

## 2SA1608

### Typical Characteristics



# PNP Transistors

## 2SA1608

### Typical Characteristics

