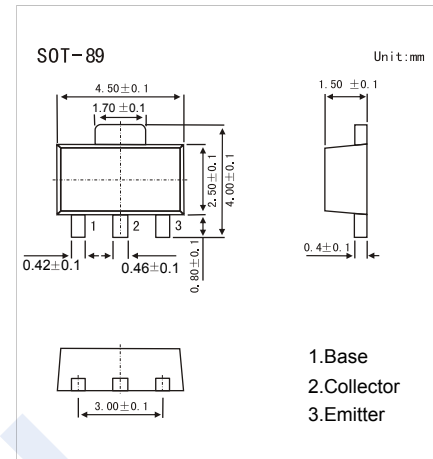


## NPN Transistors

### 2SD1419

#### ■ Features

- Low frequency power amplifier
- Complementary to 2SB1026



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V <sub>CB0</sub>	120	V
Collector - Emitter Voltage	V <sub>CE0</sub>	100	
Emitter - Base Voltage	V <sub>EB0</sub>	5	
Collector Current - Continuous	I <sub>C</sub>	1	A
Collector Current - Pulse (Note.1)	I <sub>CP</sub>	2	
Collector Power Dissipation	P <sub>C</sub>	1	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 to 150	

Note.1:PW ≤ 10 ms, Duty cycle ≤ 20%.

#### ■ 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 uA, I <sub>E</sub> = 0	120			V
Collector- emitter breakdown voltage	V <sub>CE0</sub>	I <sub>C</sub> = 1 mA, R <sub>BE</sub> = ∞	100			
Emitter - base breakdown voltage	V <sub>EB0</sub>	I <sub>E</sub> = 100 uA, I <sub>C</sub> = 0	5			
Collector-base cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = 100 V, I <sub>E</sub> = 0			10	uA
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> =500 mA, I <sub>B</sub> =50 mA			1	V
Base - emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =500 mA, I <sub>B</sub> =50 mA			1.2	
Base - emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> = 5V, I <sub>C</sub> = 150 mA			1.5	
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = 5V, I <sub>C</sub> = 150 mA	60		200	
		V <sub>CE</sub> = 5V, I <sub>C</sub> = 500 mA	30			
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 10V, I <sub>E</sub> = 0, f=1MHz		12		pF
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = 5V, I <sub>C</sub> = 150mA		140		MHz

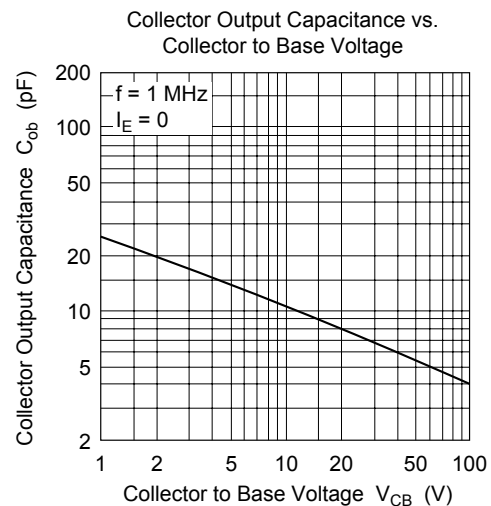
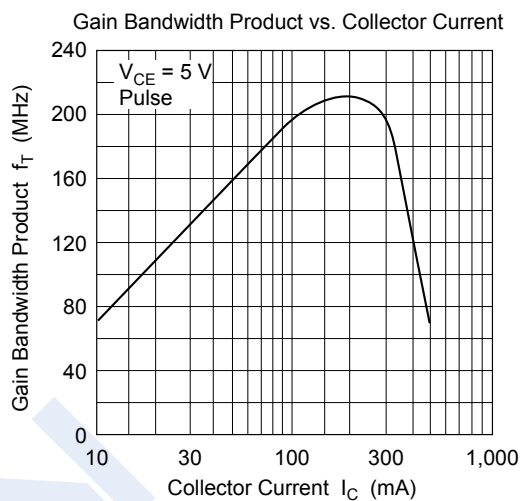
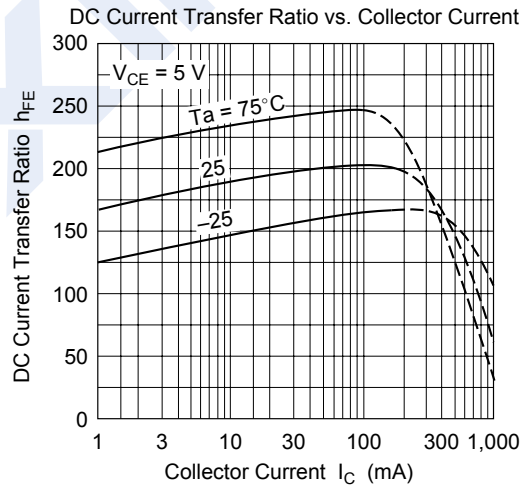
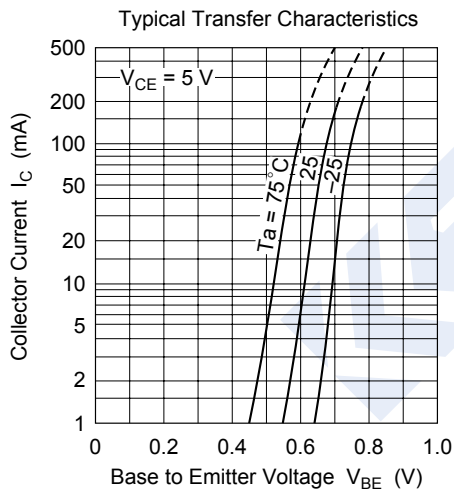
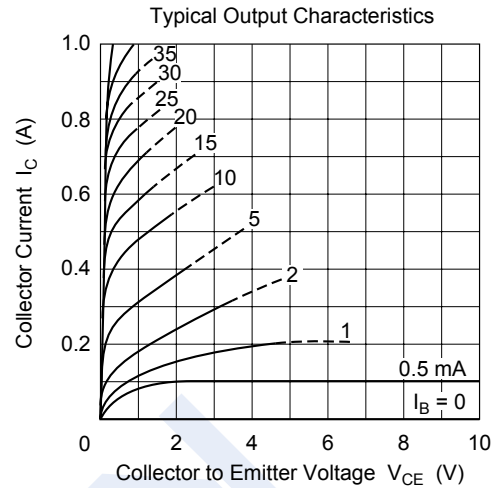
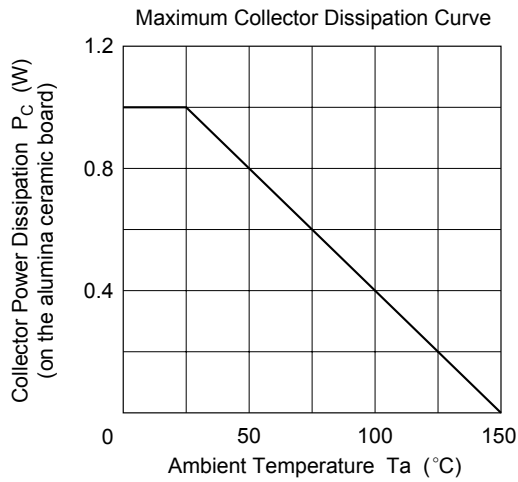
#### ■ Classification of h<sub>FE</sub>(1)

Type	2SD1419-D	2SD1419-E
Range	60-120	100-200
Marking	DD	DE

## NPN Transistors

## 2SD1419

## ■ Typical Characteristics



## NPN Transistors

## 2SD1419

## ■ Typical Characteristics

