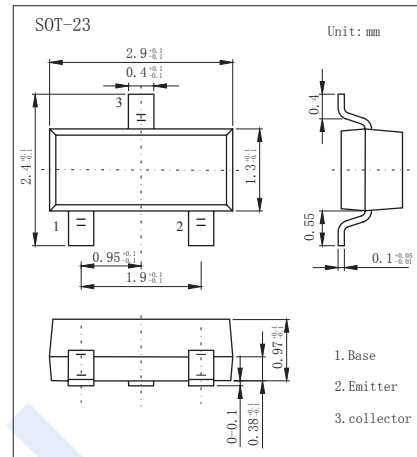


## NPN Transistors

### 2SC1815-HF

#### ■ Features

- Power dissipation
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish



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

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V <sub>CB0</sub>	60	V
Collector to Emitter Voltage	V <sub>CEO</sub>	50	V
Emitter to Base Voltage	V <sub>EB0</sub>	5	V
Collector Current to Continuous	I <sub>c</sub>	150	mA
Collector Power Dissipation	P <sub>c</sub>	200	mW
Junction Temperature	T <sub>j</sub>	125	°C
Storage Temperature	T <sub>stg</sub>	-55 to 125	°C

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector to base breakdown voltage	V <sub>CB0</sub>	I <sub>c</sub> = 100 μ A, I <sub>E</sub> =0	60			V
Collector to emitter breakdown voltage	V <sub>CEO</sub>	I <sub>c</sub> = 0.1mA, I <sub>B</sub> =0	50			V
Collector cut to off current	I <sub>CB0</sub>	V <sub>CB</sub> =60V, I <sub>E</sub> =0			0.1	μ A
Collector cut to off current	I <sub>CEO</sub>	V <sub>CE</sub> =40V, I <sub>B</sub> =0			1	μ A
Emitter cut to off current	I <sub>EB0</sub>	V <sub>EB</sub> = 5V, I <sub>c</sub> =0			0.1	μ A
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = 6V, I <sub>c</sub> = 2mA	130		400	
Collector to emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>c</sub> =100 mA, I <sub>B</sub> = 10mA			0.25	V
Base to emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>c</sub> =100 mA, I <sub>B</sub> = 10mA			1	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>c</sub> = 1mA, f=30MHz	80			MHz

#### ■ hFE Classification

Type	2SC1815-L-HF	2SC1815-H-HF
Range	130-200	200-400
Marking	HFL <sub>F</sub>	HF <sub>F</sub>

# NPN Transistors

## 2SC1815-HF

### Typical Characteristics

