

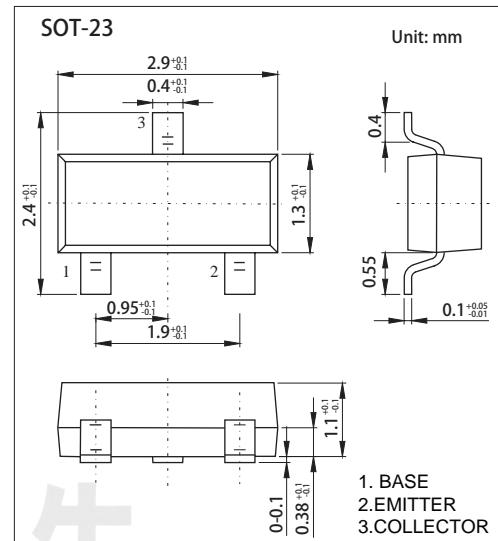
# Transistor

## PNP Transistors

### 2SA1015

#### ■ Features

- High voltage and high current
- Excellent hFE Linearity
- Low noise
- Complementary to 2SC1815



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V <sub>CB0</sub>	-50	V
Collector - Emitter Voltage	V <sub>C0E</sub>	-50	
Emitter - Base Voltage	V <sub>E0B</sub>	-5	
Collector Current - Continuous	I <sub>C</sub>	-150	mA
Collector Power Dissipation	P <sub>C</sub>	200	mW
Thermal Resistance From Junction To Ambient	R <sub>θJA</sub>	625	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to 150	

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■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collecto- base breakdown voltage	V <sub>CBO</sub>	I <sub>c</sub> = -100 μA, I <sub>E</sub> =0	-50			V
Collector- emitter breakdown voltage	V <sub>CEO</sub>	I <sub>c</sub> = -0.1 mA, I <sub>B</sub> =0	-50			
Emitter - base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> = -100 μA, I <sub>c</sub> =0	-5			
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = -50 V , I <sub>E</sub> =0			-0.1	μA
Collector cut-off current	I <sub>CEO</sub>	V <sub>CE</sub> = -50 V , I <sub>B</sub> =0			-0.1	
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>CES(sat)</sub>	I <sub>c</sub> =-100 mA, I <sub>b</sub> = -10mA			-0.3	V
Base - emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>c</sub> =-100 mA, I <sub>b</sub> = -10mA			-1.1	
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = -6V, I <sub>c</sub> = -2mA	130		400	
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = -10V, I <sub>c</sub> = -1mA,f=30MHz	80			MHz

■ Classification of h<sub>FE</sub>

Rank	L	H
Range	130-200	200-400
Marking	BA	