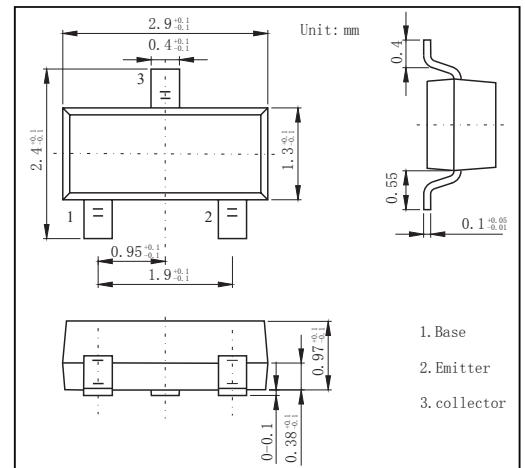


**SOT-23 Plastic-Encapsulate Transistors**
**FEATURES**

- Collector current up to 150mA
- High hFE linearity
- NPN Transistors

**MECHANICAL DATA**

- Case style: SOT-23 molded plastic
- Mounting position: any


**MAXIMUM RATINGS AND CHARACTERISTICS**

@ 25°C Ambient Temperature (unless otherwise noted)

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>EBO</sub>	5	V
Collector current (DC)	I <sub>c</sub>	150	mA
Power dissipation	P <sub>c</sub>	200	mW
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature range	T <sub>stg</sub>	-55 to +150	°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>c</sub> =100 μA, I <sub>E</sub> =0	60			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>c</sub> =1mA, I <sub>B</sub> =0	50			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =100 μA, I <sub>c</sub> =0	5			V
Collector cutoff current	I <sub>CBO</sub>	V <sub>CB</sub> = 60V, I <sub>E</sub> = 0			0.1	μA
Emitter cutoff current	I <sub>EBO</sub>	V <sub>EB</sub> = 5.0 V, I <sub>c</sub> = 0			0.1	μA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = 6.0V, I <sub>c</sub> = 1.0mA	130		400	
		V <sub>CE</sub> = 6.0V, I <sub>c</sub> = 0.1mA	40			
Collector saturation voltage	V <sub>CE(sat)</sub>	I <sub>c</sub> =100mA, I <sub>B</sub> =10mA			0.3	V
Base saturation voltage	V <sub>BE(sat)</sub>	I <sub>c</sub> =100mA, I <sub>B</sub> =10mA			1.0	V
Collector to base capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 10 V, I <sub>E</sub> = 0, f = 1 MHz			3.0	pF
Noise figure	NF	V <sub>CE</sub> =6V, I <sub>c</sub> =0.1mA, R <sub>g</sub> =10k Ω, f=1kMHZ		4		
Transition frequency	f <sub>t</sub>	V <sub>CE</sub> =6V, I <sub>c</sub> =10mA, f=30 MHz	150			MHz

RATINGS AND CHARACTERISTIC CURVES

