

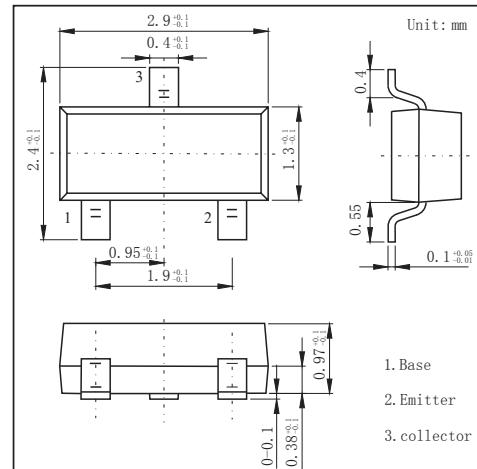
## SOT-23 Plastic-Encapsulate Transistors

### FEATURES

- Darlington connection for a high H<sub>FE</sub>
- High input impedance
- General purpose amplifiers
- TRANSISTOR NPN

### MECHANICAL DATA

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



### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Value	Units
Collector-Base Voltage	V <sub>CBO</sub>	40	V
Collector-Emitter Voltage	V <sub>CEO</sub>	32	V
Emitter-Base Voltage	V <sub>EBO</sub>	12	V
Collector Current -Continuous	I <sub>C</sub>	300	mA
Collector Dissipation	P <sub>C</sub>	200	mW
Junction and Storage Temperature	T <sub>J</sub> , 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> =100μA, I <sub>E</sub> =0	40			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =0	32			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =100μA, I <sub>C</sub> =0	12			V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =30V, I <sub>E</sub> =0				μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =12V, I <sub>C</sub> =0			0.1	μA
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =3V, I <sub>C</sub> =100mA=100mA	5000			
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =200mA, I <sub>B</sub> = 0.2mA			1.4	V
Output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz		2.5		pF
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> = 10mA f=100MHz		220		MHz

## RATINGS AND CHARACTERISTIC CURVES

