

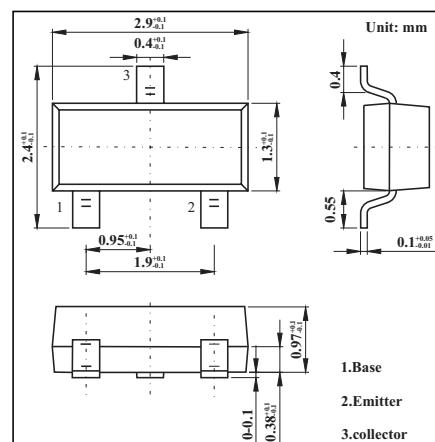
## SOT-23 Plastic-Encapsulate Transistors

### FEATURES

- High DC current gain
- High emitter-base voltage
- Low VCE (sat)

### MECHANICAL DATA

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



### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-base voltage	V <sub>CBO</sub>	25	V
Collector-emitter voltage	V <sub>CEO</sub>	20	V
Emitter-base voltage	V <sub>EBO</sub>	12	V
Collector current	I <sub>C</sub>	0.5	A
		1	
Collector power dissipation	P <sub>C</sub>	0.2	W
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 ~ +150	°C

\* Single pulse Pw=100ms

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	B <sub>VCBO</sub>	I <sub>C</sub> =10uA	25			V
Collector-emitter breakdown voltage	B <sub>VCEO</sub>	I <sub>C</sub> =1mA	20			V
Emitter-base breakdown voltage	B <sub>VEBO</sub>	I <sub>E</sub> =10uA	12			V
Collector cutoff current	I <sub>CBO</sub>	V <sub>CB</sub> =20V			0.5	A
Emitter cutoff current	I <sub>EBO</sub>	V <sub>EB</sub> =10V			0.5	A
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> /I <sub>B</sub> =500mA/20mA		0.18	0.4	V
DC current transfer ratio	h <sub>FE</sub>	V <sub>CE</sub> =3V, I <sub>C</sub> =10mA	820		2700	
Output capacitance	f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>E</sub> =-50mA, f=100MHz		350		MHz
Transition frequency	C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz		8.0		pF
Output On-resistance	R <sub>on</sub>	I <sub>B</sub> =1mA, V <sub>i</sub> =100mV(rms), f=1kHz		0.8		

\*Measured using pulse current