

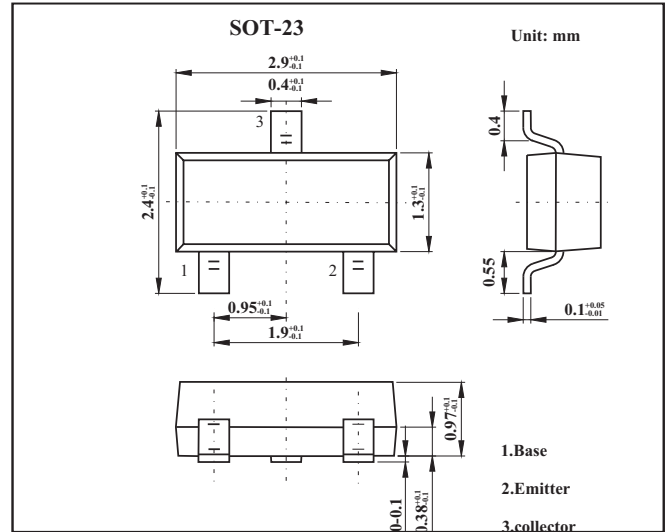
SOT-23 Plastic-Encapsulate Transistors

Features

- High Voltage Transistors
- NPN Silicon
- Power Dissipation of 350mW
- High Stability and High Reliability

MECHANICAL DATA

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



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameters	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	400	V
Collector-Emitter Voltage	V _{CEO}	400	V
Emitter -Base Voltage	V _{EBO}	6	V
Collector Current-Continuous	I _C	200	mA
Collector Power Dissipation	P _C	350	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55-+150	°C
Thermal resistance From junction to ambient	R _{θJA}	357	°C/W

Electrical Characteristics (Ratings at 25 °C ambient temperature unless otherwise specified).

Parameter	Symbols	Test Condition	Limits		Unit
			Min	Max	
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =100uA, I _E =0	400		V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	400		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =10uA, I _C =0	6		V
Collector cut-off current	I _{CBO}	V _{CB} =400V, I _E =0		100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =4V, I _C =0		100	nA
DC current gain	h _{FE} (1)*	V _{CE} =10V, I _C =1mA	40		
	h _{FE} (2)*	V _{CE} =10V, I _C =10mA	50		200
	h _{FE} (3)*	V _{CE} =10V, I _C =50mA	45		
	h _{FE} (4)*	V _{CE} =10V, I _C =100mA	40		
Collector-emitter saturation voltage	V _{CE(sat)1} *	I _C =1mA, I _B =0.1mA		0.40	V
Collector-emitter saturation voltage	V _{CE(sat)2} *	I _C =10mA, I _B =1mA		0.50	V
Collector-emitter saturation voltage	V _{CE(sat)3} *	I _C =50mA, I _B =5mA		0.75	V
Base -emitter saturation voltage	V _{BE(sat)} *	I _C =10mA, I _B =1mA		0.75	V
Collector output capacitance	C _{ob}	V _{CB} =20V, I _E =0; f=1MHz		7	pF
Emitter input capacitance	C _{ib}	V _{EB} =0.5V, I _C =0; f=1MHz		130	pF

*Pulse test: pulse width ≤ 300us, duty cycle ≤ 2.0%.

RATINGS AND CHARACTERISTIC CURVES

Typical characteristics

