

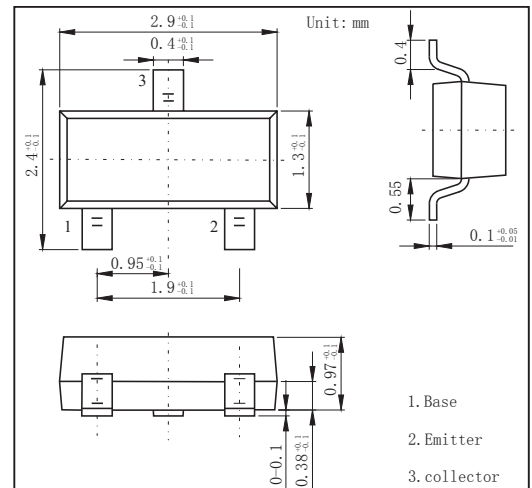
SOT-23 Plastic-Encapsulate Transistors

FEATURES

- Low Collector-to-Emitter Saturation Voltage
- Fast Switching Speed
- 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_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current to Continuous	I_C	150	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	125	°C
Storage Temperature	T_{stg}	-55~+150	°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to base breakdown voltage	V_{CBO}	$I_C = 100 \mu A, I_E = 0$	60			V
Collector to emitter breakdown voltage	V_{CEO}	$I_C = 0.1 \text{ mA}, I_B = 0$	50			V
Collector cut to off current	I_{CBO}	$V_{CB} = 60V, I_E = 0$			0.1	A
Collector cut to off current	I_{CEO}	$V_{CE} = 40V, I_B = 0$			1	A
Emitter cut to off current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			0.1	A
DC current gain	h_{FE}	$V_{CE} = 6V, I_C = 2mA$	130		400	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$			0.25	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$			1	V
Transition frequency	f_T	$V_{CE} = 10V, I_C = 1 \text{ mA}, f = 30 \text{ MHz}$	80			MHz

RATINGS AND CHARACTERISTIC CURVES

