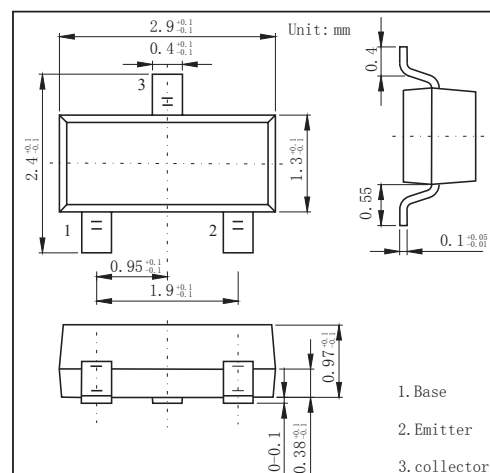


SOT-23 Plastic-Encapsulate Transistors
FEATURES

- Collector Current Capability $I_C=100\text{mA}$
- Collector Emitter Voltage $V_{CE0}=50\text{V}$
- 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	Rating	Unit
Collector - Base Voltage	V_{CB0}	50	V
Collector - Emitter Voltage	V_{CE0}	50	
Emitter - Base Voltage	V_{EB0}	6	
Collector Current - Continuous	I_C	100	mA
Collector Current - Pulse	I_{CP}	200	
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{stg}	-55 to 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C=100\mu\text{A}, I_E=0$	50			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C=1\text{mA}, I_B=0$	50			
Emitter - base breakdown voltage	V_{EB0}	$I_E=100\mu\text{A}, I_C=0$	6			
Collector-base cut-off current	I_{CBO}	$V_{CB}=50\text{V}, I_E=0$			0.1	uA
Emitter cut-off current	I_{EBO}	$V_{EB}=6\text{V}, I_C=0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$			0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$			1	
DC current gain	h_{FE}	$V_{CE}=6\text{V}, I_C=1\text{mA}$	150		800	
		$V_{CE}=6\text{V}, I_C=0.1\text{mA}$	50			
Noise figure	NF	$V_{CE}=6\text{V}, I_E=0.1\text{mA}, f=1\text{KHz}, R_G=2\text{K}\Omega$			15	dB
Collector output capacitance	C_{ob}	$V_{CB}=6\text{V}, I_E=0, f=1\text{MHz}$			4	pF
Transition frequency	f_T	$V_{CE}=6\text{V}, I_C=10\text{mA}$	180			MHz

RATINGS AND CHARACTERISTIC CURVES

