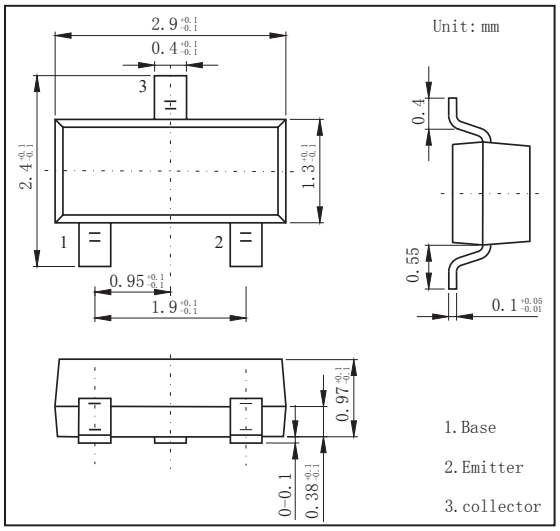
SOT-23 Plastic-Encapsulate Transistors

FEATURES

- Collector Current Capability IC=20mA
- Collector Emitter Voltage VCEO=30V
- NPN silicon transistor

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 - Base Voltage	V_{CBO}	40	V
Collector - Emitter Voltage	V_{CEO}	30	
Emitter - Base Voltage	V_{EBO}	4	
Collector Current - Continuous	I_C	20	mA
Collector Power Dissipation	P_C	100	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	1000	℃/W
Junction Temperature	T_J	125	℃
Storage Temperature Range	T_{stg}	-55 to +125	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= 100 μA， I_E= 0	40			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= 1 mA， I_B= 0	30			
Emitter - base breakdown voltage	V_{EBO}	I_E= 100 μ A， I_C= 0	4			
Collector-base cut-off current	I_{CBO}	V_{CB}= 18 V , I_E= 0			0.5	uA
Emitter cut-off current	I_{EBO}	V_{EB}= 4V , I_C=0			0.5	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=100 mA, I_B=10mA			0.4	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=100 mA, I_B=10mA			1.2	
DC current gain	h_{FE}	V_{CE}= 6V, I_C= 1mA	40		200	
Noise Figure	NF	V_{CE}= 6V, I_E= -1mA,f=100MHz		2.5	5	dB
Reverse Transfer capacitance	C_{re}	V_{CB}= 6V, I_E= 0,f=1MHz		0.7		pF
Transition frequency	f_T	V_{CE}= 6V, I_C= 1mA		550		MHz

RATINGS AND CHARACTERISTIC CURVES