

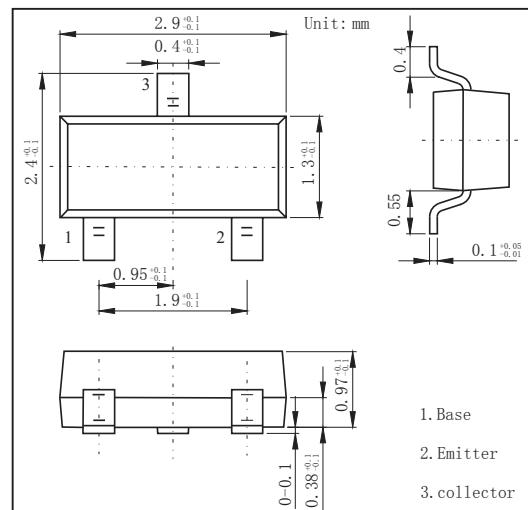
SOT-23 Plastic-Encapsulate Transistors

FEATURES

- High hFE
- Low VCE(sat)
- For general amplification
- NPN Transistors

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	VCBO	60	V
Collector - Emitter Voltage	VCEO	50	
Emitter - Base Voltage	VEBO	7	
Collector Current - Continuous	IC	100	mA
Collector Power Dissipation	PC	200	mW
Thermal Resistance from Junction to Ambient	R _{θJA}	625	°C/W
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	VCBO	I _C = 100 μA, I _E = 0	60			V
Collector- emitter breakdown voltage	VCEO	I _C = 2 mA, I _B = 0	50			
Emitter - base breakdown voltage	VEBO	I _E = 100 μ A, I _C = 0	7			
Collector-base cut-off current	I _{CBO}	V _{CB} = 50 V , I _E = 0			0.1	uA
Collector-emitter cut-off current	I _{CEO}	V _{CE} = 30 V , I _B = 0			100	
Emitter cut-off current	I _{EBO}	V _{EB} = 5V , I _C =0			0.1	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =100 mA, I _B =10mA			0.3	V
Base - emitter saturation voltage	V _{BE(sat)}	I _C =100 mA, I _B =10mA			1.2	
DC current gain	h _{FE(1)}	V _{CE} = 2V, I _C = 100mA	90			
	h _{FE(2)}	V _{CE} = 10V, I _C = 2mA	160		460	
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E =0,f=1MHz		3.5		pF
Transition frequency	f _T	V _{CE} = 10V, I _C = 2mA,f=200MHz		150		MHz