HFZT

2SC1623

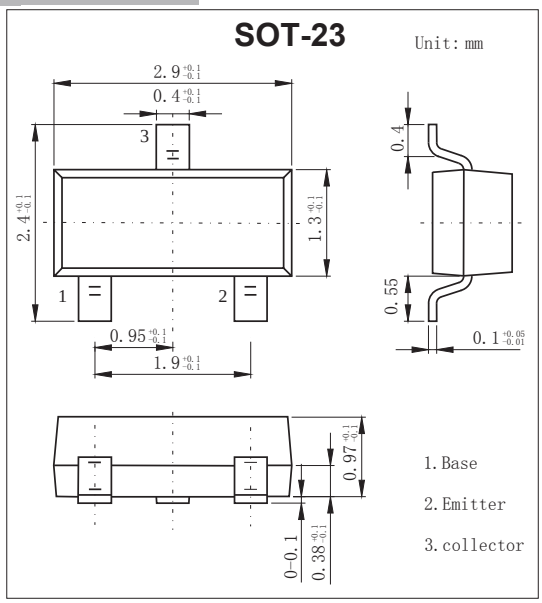
SOT-23 Plastic-Encapsulate Transistors

Features

- High DC Current Gain: hFE = 200 TYP.
  VCE = 6.0 V, IC = 1.0 mA
- High Voltage: VCE O = 50 V
- 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 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 (DC)	I_C	100	mA
Collector power dissipation	P_C	200	mW
Junction temperature	T_j	150	℃
Storage temperature range	T_{stg}	-55 to +150	℃

PACKAGE INFORMATION

Device	Package	Shipping
2SC1623	SOT-23	3000/Tape&Reel

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= 100 μA, I_E= 0	60			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= 1 mA, I_B= 0	50			
Emitter - base breakdown voltage	V_{EBO}	I_E= 100 μA, I_C= 0	5			
Collector-base cut-off current	I_{CBO}	V_{CB}= 60 V , I_E= 0			100	nA
Emitter cut-off current	I_{EBO}	V_{EB}= 5V , I_C=0			100	
Collector-emitter saturation voltage *	$V_{CE(sat)}$	I_C=100 mA, I_B=10mA		0.15	0.3	V
Base - emitter saturation voltage *	$V_{BE(sat)}$	I_C=100 mA, I_B=10mA		0.86	1	
Base - emitter voltage *	V_{BE}	V_{CE}= 6V, I_C= 1mA	0.55		0.7	
DC current gain *	h_{FE}	V_{CE}= 6V, I_C= 1mA	90	200	600	
Collector output capacitance	C_{ob}	V_{CB}= 6V, I_E= 0,f=1MHz		3		pF
Transition frequency	f_T	V_{CE}= 6V, I_E= -10mA		250		MHz

*. PW≤350 us, duty cycle ≤2%

■ h_{FE} Classification

Type	2SC1623-L4	2SC1623-L5	2SC1623-L6	2SC1623-L7
Range	90-180	135-270	200-400	300-600
Marking	L4	L5	L6	L7

RATINGS AND CHARACTERISTIC CURVES

■ Typical Characteristics