

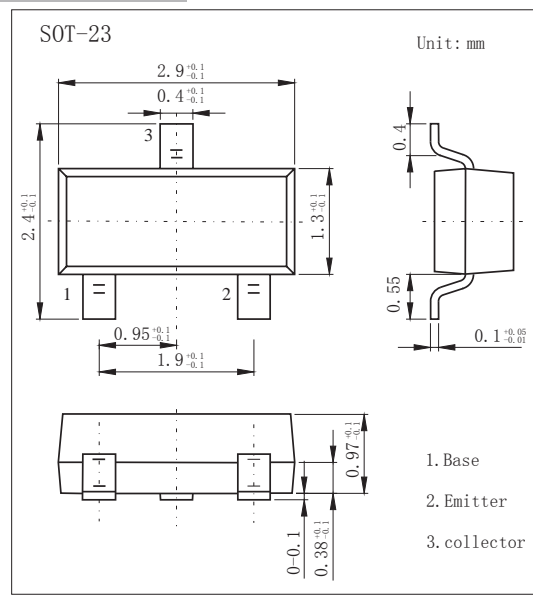
## SOT-23 Plastic-Encapsulate Transistors

### Features

- Excellent hFE linearity
- Collector Current : $I_C=0.1A$
- 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	$V_{CBO}$	50	V
Collector-Emitter Voltage	$V_{CEO}$	45	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current -Continuous	$I_C$	0.1	A
Collector Power Dissipation	$P_C$	0.2	W
Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{stg}$	-55 to 150	°C

### PACKAGE INFORMATION

Device	Package	Shipping
S9014	SOT-23	3000/Tape&

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{CBO}$	$I_C=100\mu A, I_E=0$	50			V
Collector-emitter breakdown voltage	$V_{CEO}$	$I_C=1mA, I_B=0$	45			V
Emitter-base Breakdown voltage	$V_{EBO}$	$I_E=100\mu A, I_C=0$	5			V
Collector cutoff current	$I_{CBO}$	$V_{CB}=50V, I_E=0$			0.1	$\mu A$
Emitter cutoff current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=5V, I_C=1mA$	200		1000	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$			0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=100mA, I_B=10mA$			1	V
Transition frequency	$f_T$	$V_{CE}=5V, I_C=10mA, f=30MHZ$	150			MHZ

### hFE Classification

Type	S9014-L	S9014-H
Range	200-450	450-1000
Marking	J6	