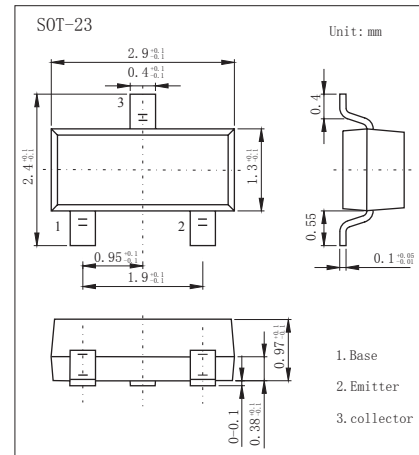


NPN Transistors

S9014

■ Features

- Excellent h_{FE} linearity
- Collector Current : $I_C=0.1A$



■ Absolute Maximum Ratings $T_a = 25^\circ C$

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	$^\circ C$
Storage Temperature	T_{stg}	-55 to 150	$^\circ C$

■ Electrical Characteristics $T_a = 25^\circ C$

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	μA
Emitter cutoff current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	μA
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

■ h_{FE} Classification

Type	KST9014-L	KST9014-H
Range	200-450	450-1000
Marking	J6	

S9014

■ Typical Characteristics

