

S9014

FEATURES

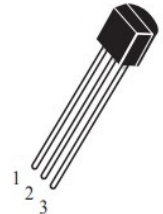
- Complementary to S9015
- Package: TO-92, SOT-23

Maximum Ratings (Ta = 25°)

Parameter	Symbol	Rating		Unit
Collector-base voltage	BV_{CBO}	50		V
Collector-emitter voltage	BV_{CEO}	45		V
Emitter-base voltage	BV_{EBO}	5		V
Collector current	I_{CM}	0.1		A
Collector Power Dissipation	P_C	SOT-23	200	mW
		TO-92	450	
Junction Temperature	T_j	150		°C
Storage Temperature	T_{stg}	-55~+150		°C

TO-92

1. EMITTER
2. BASE
3. COLLECTOR



SOT-23

1. BASE
2. EMITTER
3. COLLECTOR



Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=100\mu A, I_E=0$	50			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=1mA, I_B=0$	45			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=100\mu A, I_C=0$	5			V
collector-base cut-off current	I_{CBO}	$V_{CB}=50V, I_E=0$			0.1	μA
collector-emitter cut-off current	I_{CEO}	$V_{CE}=35V, I_B=0$			0.1	μA
emitter-base cut-off current	I_{EBO}	$V_{EB}=3V, I_C=0$			0.1	μA
DC current gain	H_{FE}	$V_{CE}=5V, I_C=1mA$	60		1000	
collector-emitter saturation voltage	V_{CESAT}	$I_C=100mA, I_B=5mA$			0.3	V
Base-Emitter Saturation Voltage	V_{BESAT}	$I_C=100mA, I_B=5mA$			1.0	
Transition frequency	f_T	$V_{CE}=5V, I_C=10mA$	150			MHz

Classification of H_{FE}

Rank	S9014-A	S9014-B	S9014-C	S9014-D
Range	200-300	300-400	400-500	500-1000