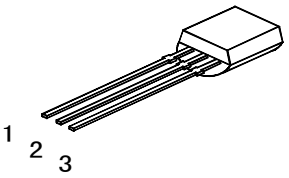
MICRO ELECTRONICS

S9014

DESCRIPTION

The S9014 is an NPN epitaxial silicon planar transistor designed for use in the audio output stage and converter/inverter circuits.



S9014: 1. Emitter 2. Base 3. Collect

ABSOLUTE MAXIMUM RATINGS

Maximum Temperatures

Storage Temperature	-55~135℃
Operating Temperature	135℃
Lead Temperature (Soldering, <10s)	230℃

Maximum Power Dissipation

Total Disspation at 25℃ Ambient Temperature	0.4W

Maximum Voltage

V_{CBO} Collector to Base Voltage	50V
V_{CEO} Collector to Emitter Voltage	45V
V_{EBO} Emitter to Base Voltage	5V
I_C Collector Current (continuous)	0.5A

ELECTRICAL CHARACTERISTICS (Ta=25℃ Unless otherwise noted)

SYMBOL	CHARACTERISTICS	MIN.	TYP.	MAX.	UNITS	TEST CONDITIOMNS
H_{FE1}	DC current gain	60		1000		Ic=1mA Vce=5V
$V_{CE(SAT)}$	Collector Saturation Voltage			0.3	V	Ic=100mA Ib=10mA
V_{BE}	Base-Emitter Voltage			0.85	V	Ic=1mA V_{CE}=5V
BV_{CEO}	Collector to Emitter Breakdown Voltage	45			V	Ic=1mA Ib=0
BV_{CBO}	Collector to Base Breakdown Voltage	50			V	Ic=100μA Ie=0
BV_{EBO}	Emitter to Base Breakdown Voltage	5			V	Ie=100μA Ic=0
I_{CBO}	Collector Cutoff Current			0.1	μA	Vcb=50V Ie=0
f_T	Transition frequency	150				Ic=10mA Vce=5V f=30MHz
C_{CB}	Collector to Base Capacitance			6	pF	Vcb=10V Ic=0 f=1MHz

Note:

H_{FE1} classification: A: 60~150 B: 100~300 C: 200~600 D: 400~1000

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