

SOT-23 Plastic-Encapsulate Transistors

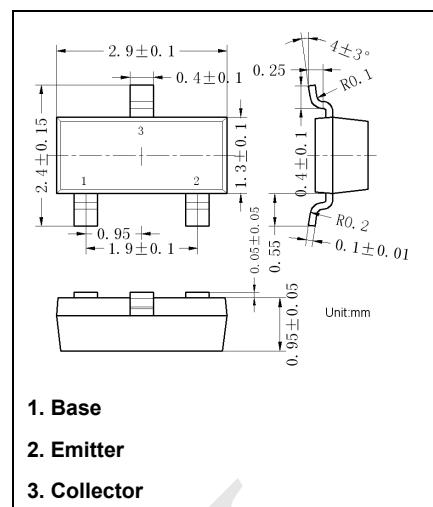
S9018

NPN Transistors

Features

- AM/FM Amplifier, Local Oscillator of FM/VHF Tuner
- High Current Gain Bandwidth Product

Marking: J8



Maximum Ratings (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector Base Voltage	30	V
V _{CE0}	Collector Emitter Voltage	15	V
V _{EB0}	Emitter Base Voltage	5	V
I _c	Collector Current -Continuous	50	mA
P _c	Collector Power Dissipation	200	mW
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55 ~ +150	°C
R _{θJA}	Thermal Resistance from Junction to Ambient	625	°C/W

Electrical Characteristics (T_a=25°C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
V _{(BR)CBO}	Collector-base breakdown voltage	I _c = 100μA, I _E = 0	30			V
V _{(BR)CEO} *	Collector-emitter breakdown voltage	I _c = 1mA, I _B = 0	15			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E = 10μA, I _C = 0	5			V
I _{CBO}	Collector cut-off current	V _{CB} = 12V, I _E = 0			50	nA
I _{CEO}	Collector cut-off current	V _{CE} = 12V, I _B = 0			100	nA
I _{EBO}	Emitter cut-off current	V _{EB} = 3V, I _C = 0			100	nA
h _{FE}	DC current gain	V _{CE} = 5V, I _c = 1mA	100		200	
V _{CE(sat)}	Collector-emitter saturation voltage	I _c = 10mA, I _B = 1mA			0.5	V
V _{BE(sat)}	Base-emitter saturation voltage	I _c = 10mA, I _B = 1mA			1.4	V
f _t	Transition frequency	V _{CE} =5V, I _C =5mA, f=400MHz		800		MHz

Typical Characteristics

