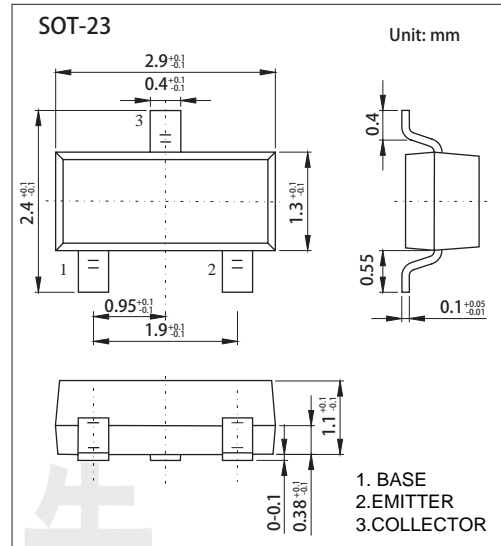


Transistor

NPN Transistors S9018

■ Features

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



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	30	V
Collector - Emitter Voltage	V_{CE0}	15	
Emitter - Base Voltage	V_{EB0}	5	
Collector Current - Continuous	I_c	50	mA
Collector Power Dissipation	P_c	200	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to 150	

Transistor

NPN Transistors S9018

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collecto- base breakdown voltage	VCBO	Ic= 100 μA, IE=0	30			V
Collector- emitter breakdown voltage	VCEO	Ic= 1 mA, IB=0	15			
Emitter - base breakdown voltage	VEBO	IE= 100 μA, IC=0	5			
Collector cut-off current	ICBO	VCB= 12 V, IE=0			0.05	μA
Collector cut-off current	ICEO	VCE= 12 V, IB=0			0.1	
Emitter cut-off current	IEBO	VEB= 3V, IC=0			0.1	
Collector-emitter saturation voltage	VCE(sat)	Ic=10 mA, IB= 1mA			0.5	V
Base - emitter saturation voltage	VBE(sat)	Ic=10 mA, IB= 1mA			1.4	
DC current gain	hFE	VCE= 5V, IC= 1mA	70		190	
Transition frequency	fr	VCE= 5V, IC= 5mA,f=400MHz		800		MHz

■ Classification of hFE

Rank	L	H
Range	70-105	105-190
Marking	J8	

Transistor

NPN Transistors S9018

Typical Characteristics

