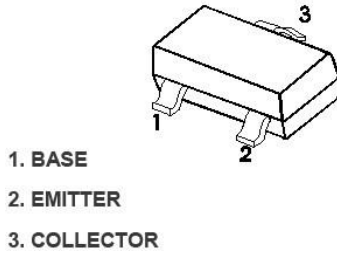


SOT-23



MARKING:J8

特征 Features

- AM/FM Amplifier, Local Oscillator of FM/VHF Tuner
- 最大功率耗散 200mW; Power Dissipation of 200mW
- 高稳定性和可靠性。High Stability and High Reliability

机械数据 Mechanical Data

- 封装: SOT-23 封装 SOT-23 Small Outline Plastic Package
- 环氧树脂UL 易燃等级 Epoxy UL: 94V-0
- 安装位置: 任意 Mounting Position: Any
- Device meets MSL 1 requirements

极限值和温度特性($T_A = 25^\circ\text{C}$ 除非另有规定)Maximum Ratings & Thermal Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

参数 Parameters	符号 Symbol	数值 Value	单位 Unit
Collector-Base Voltage	V_{CB0}	30	V
Collector-Emitter Voltage	V_{CEO}	15	V
Emitter -Base Voltage	V_{EBO}	5	V
Collector Current-Continuous	I_C	50	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55-+150	$^\circ\text{C}$
Thermal resistance from junction to ambient	$R_{\theta JA}$	625	$^\circ\text{C/W}$

电特性 Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

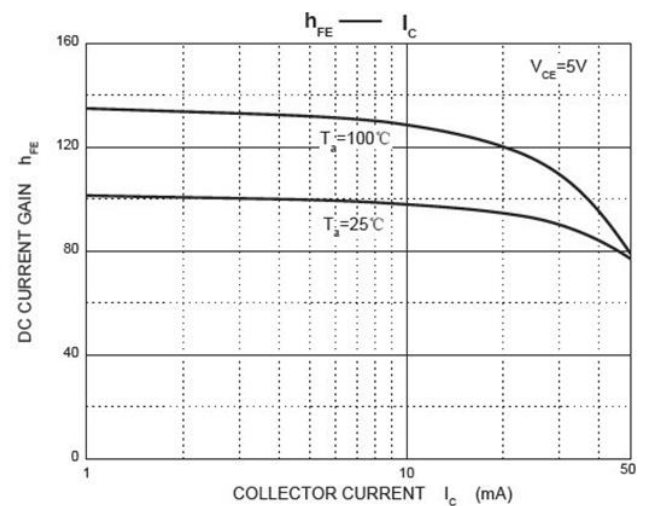
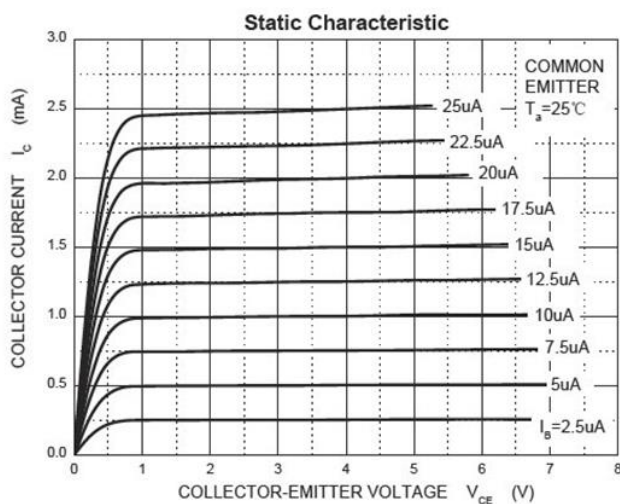
参数 Parameter	符号 Symbols	测试条件 Test Condition	界限 Limits			单位 Unit
			Min	Typ	Max	
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	15			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}, I_C=0$	5			V
Collector cut-off current	I_{CEO}	$V_{CE}=12\text{V}, I_B=0$			100	nA
Collector cut-off current	I_{CBO}	$V_{CB}=12\text{V}, I_E=0$			50	nA

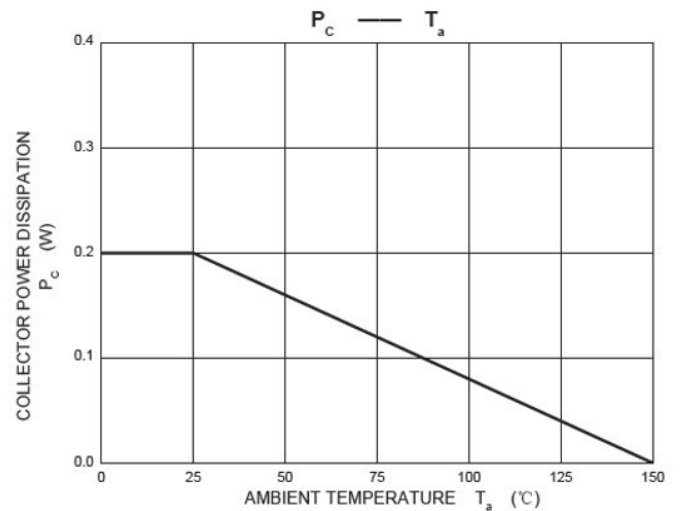
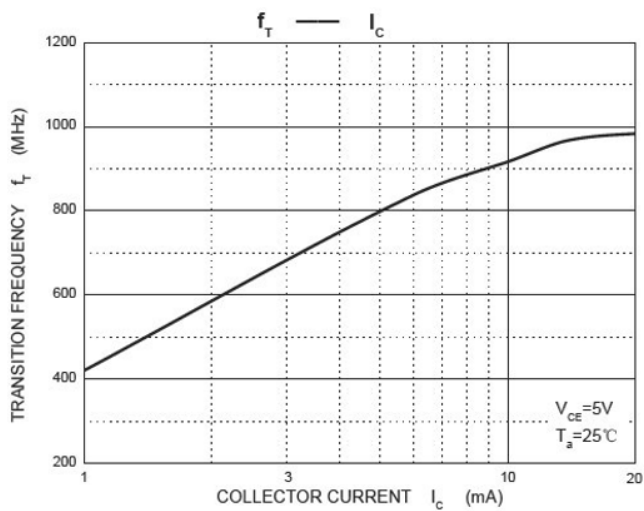
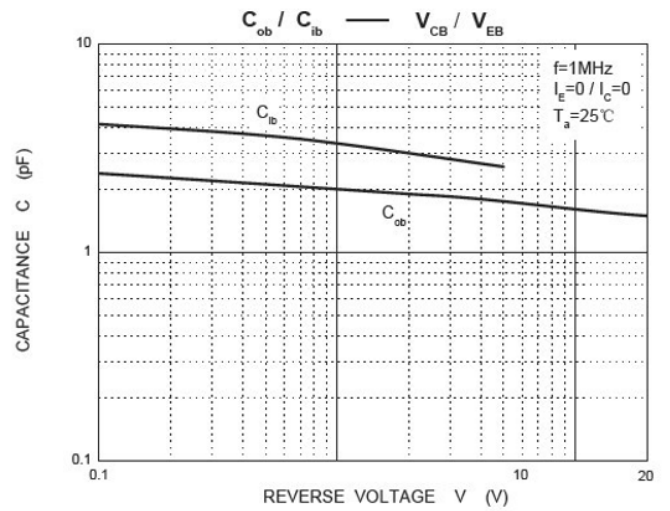
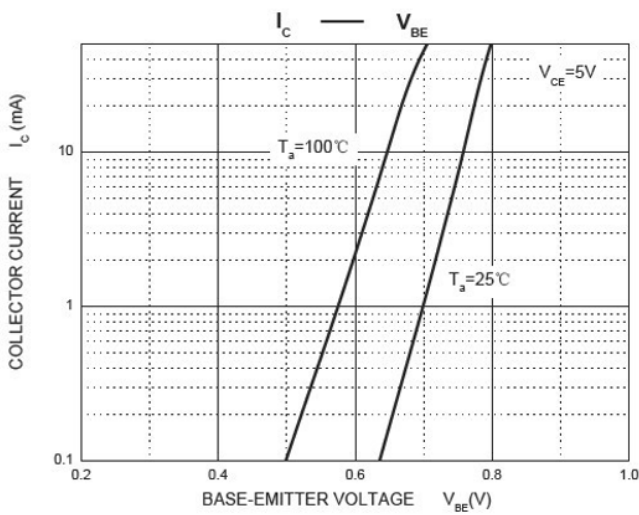
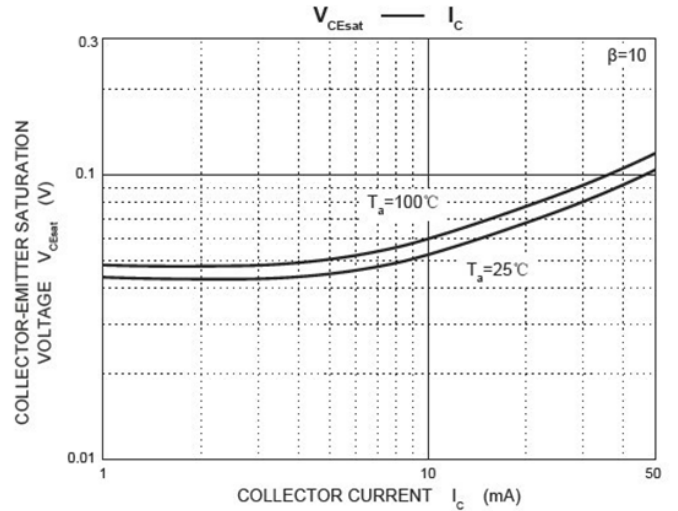
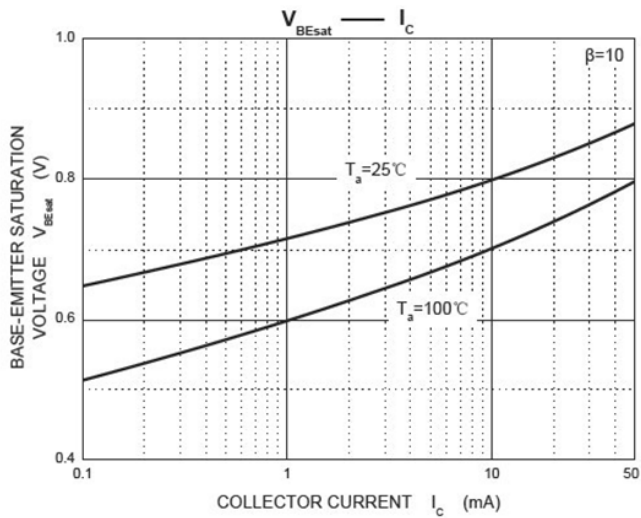
Emitter cut-off current	I_{EBO}	$V_{EB}=3V, I_C=0$			100	nA
DC current gain	h_{FE}	$V_{CE}=5V, I_C=1mA$	70		190	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$			0.50	V
Base -emitter saturation voltage	$V_{BE(sat)}$	$I_C=10mA, I_B=1mA$			1.40	V
Transition frequency	f_T	$V_{CE}=5V, I_C=5mA, f=400MHz$		800		MHz

CLASSIFICATION OF $h_{FE}(1)$

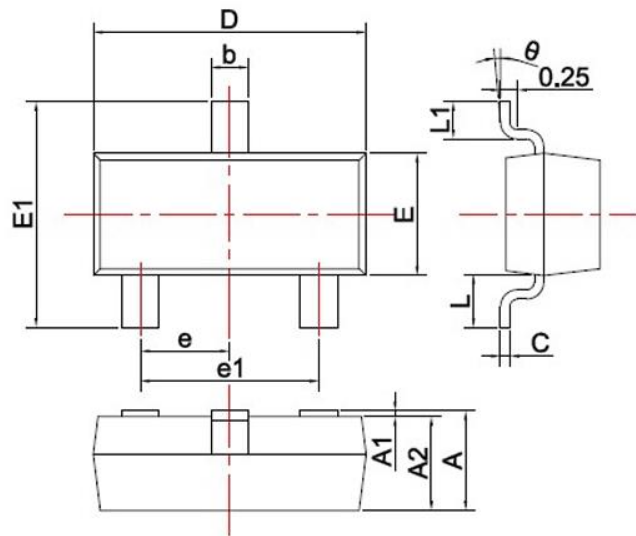
RANK	L	H
RANGE	70-105	105-190

Typical Performance Characteristics ($T_A=25^\circ C$ unless otherwise Specified)





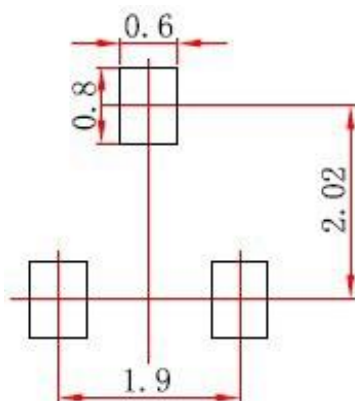
SOT-23 Package Outline Drawing



SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°

Unit: mm

Suggested Land Pattern

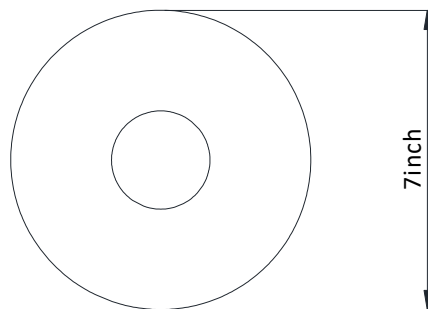
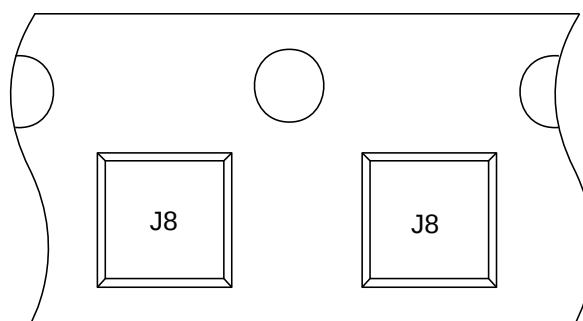


Note:

1. Controlling dimension: In millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

Part Number	Shipping	Reel Size
S9018	3000/Tape &Reel	7 inch

Reel Dimensions

[illegible]

User Direction of Feed

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