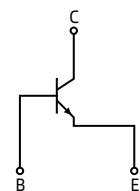


Features

- High P_c and f_T , low frequency shift.
- High Current Gain Bandwidth Product.
- Suitable for AM/FM IF amplifier, local oscillator.



SOT23



Equivalent Circuit

Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	15	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	0.05	A
P_c	Collector Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	625	$^{\circ}\text{C/W}$
T_j, T_{stg}	Operation Junction And Storage Temperature Range	-55 ~ +150	$^{\circ}\text{C/W}$

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

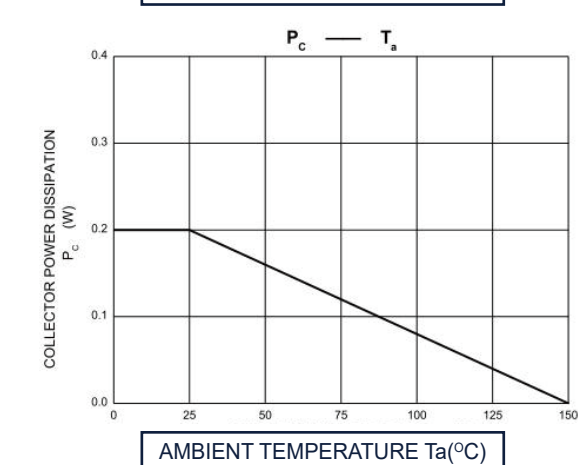
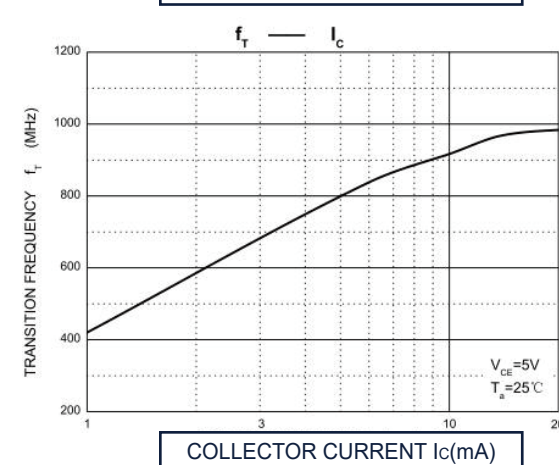
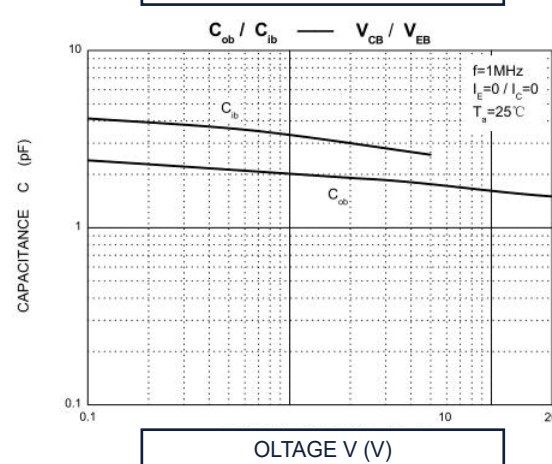
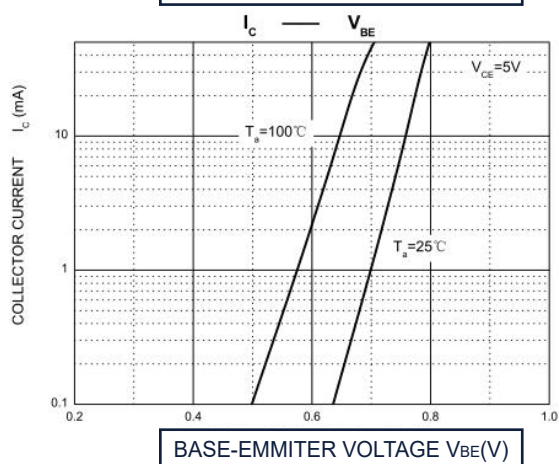
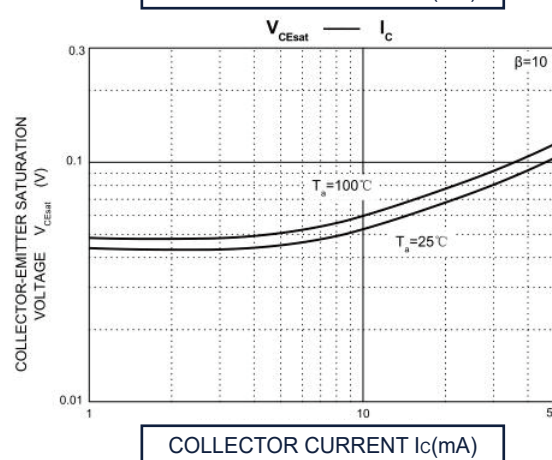
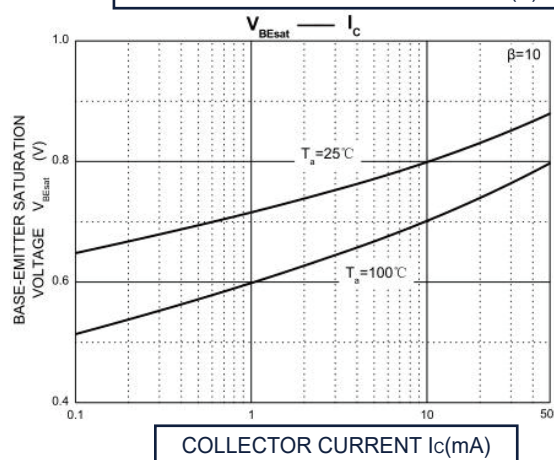
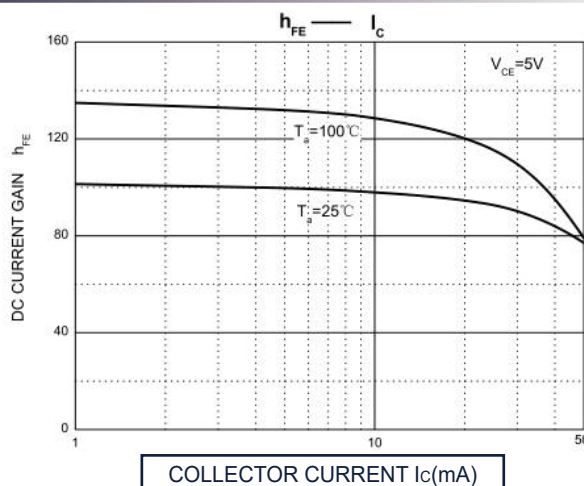
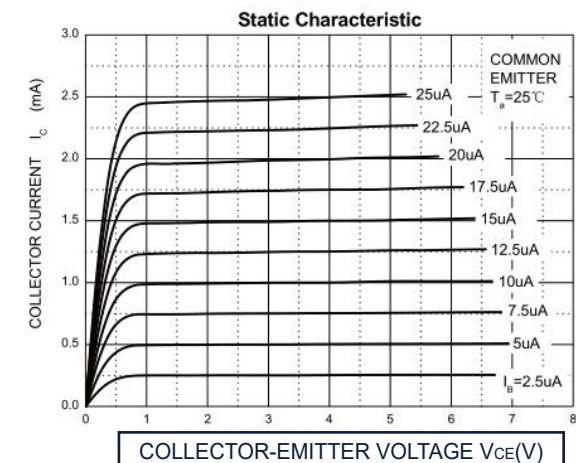
Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=100\mu\text{A}, I_E=0$	30			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=1\text{mA}, I_B=0$	15			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=100\mu\text{A}, I_C=0$	5			V
I_{CEO}	Collector cut-off current	$V_{CE}=12\text{V}, I_E=0$			100	nA
I_{CBO}	Collector cut-off current	$V_{CB}=12\text{V}, I_E=0$			50	nA
I_{EBO}	Emitter cut-off current	$V_{EB}=3\text{V}, I_C=0$			100	nA
h_{FE}	DC current gain	$V_{CE}=5\text{V}, I_C=1\text{mA}$	100		200	
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=10\text{mA}, I_B=1\text{mA}$			0.5	V
$V_{BE(sat)}$	Base-emitter saturation voltage				1.4	V
f_T	Transition frequency	$V_{CE}=5\text{V}, I_C=5\text{mA}, f=400\text{MHz}$		800		MHz

Ordering information

Product ID	Pack	Naming rule	Marking	$h_{FE}(1)$	Qty(PCS)
S9018	SOT23	S9018 ↓ 产品名称 product name	J8	100 ~ 200	3000



Typical Characteristics





SOT23 Package Outline Dimensions



Symbol	Dimensions in Millimeters	
	mm	
	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°