

● 硅 NPN 外延平面管

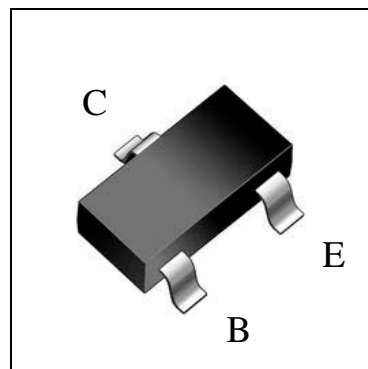
● 用途:

高频放大/振荡/混频

● 特点:

高传输频率 f_T ;

低输出电容 C_{ob} 、 C_{rb} ;



Package : SOT-23

Marking Symbol: R25

● 极限参数($T_a=25^\circ\text{C}$)

参数	符号	单位	规范值
耗散功率	P_{tot}	mW	200
集电极电流	I_c	mA	100
结温	$T(j)$	$^\circ\text{C}$	125
贮存温度	T_{stg}	$^\circ\text{C}$	-55~+125
集电极-基极电压	V_{CB0}	V	20
集电极-发射极电压	V_{CEO}	V	12
发射极-基极电压	V_{EBO}	V	3

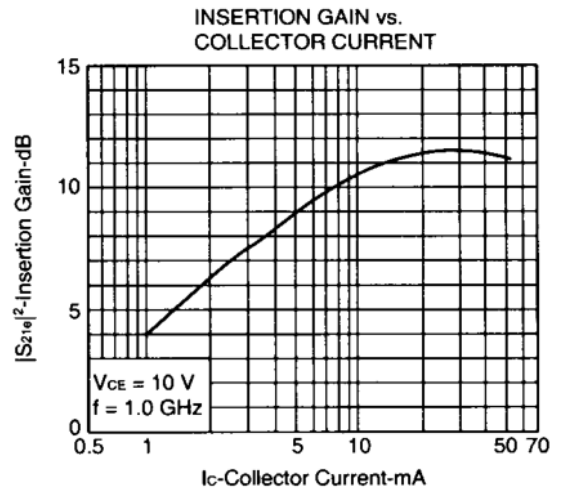
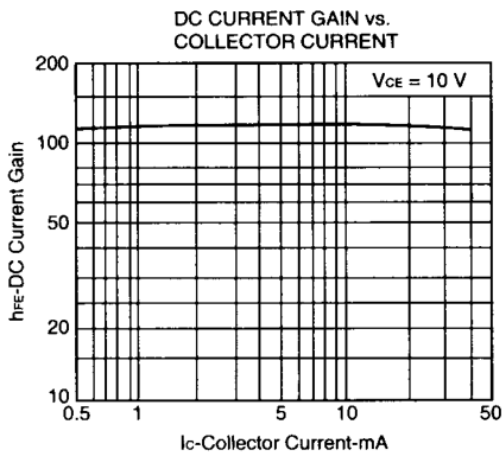
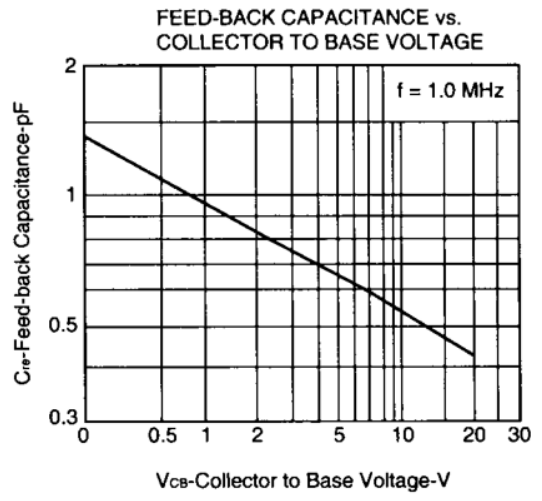
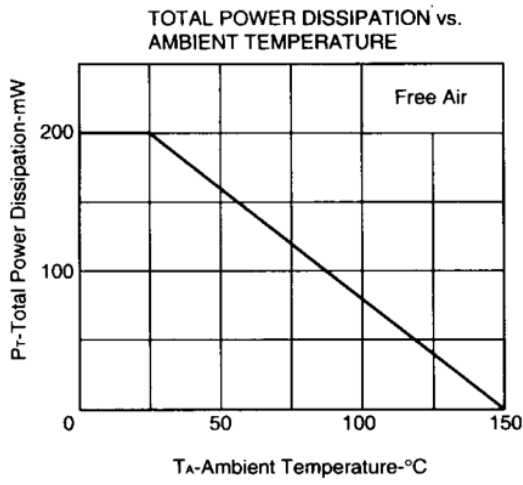
● 电参数($T_a=25^\circ\text{C}$)

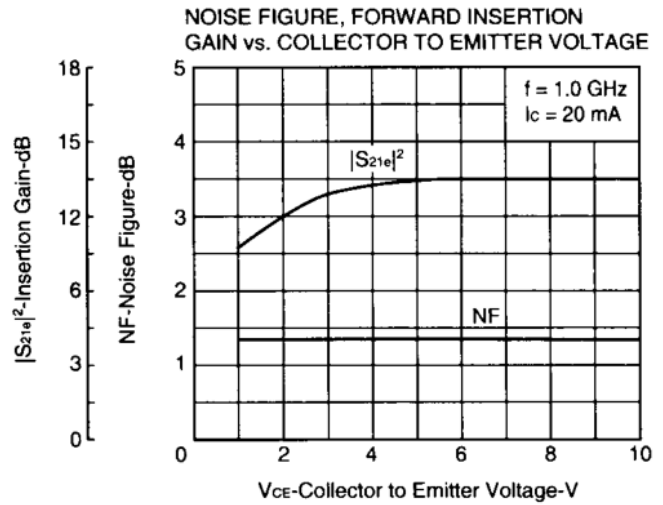
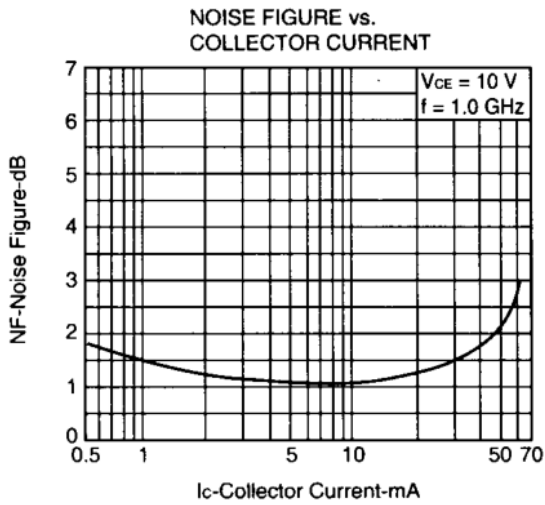
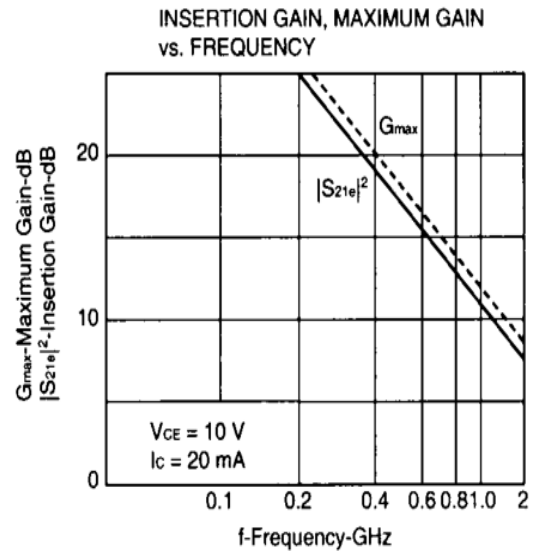
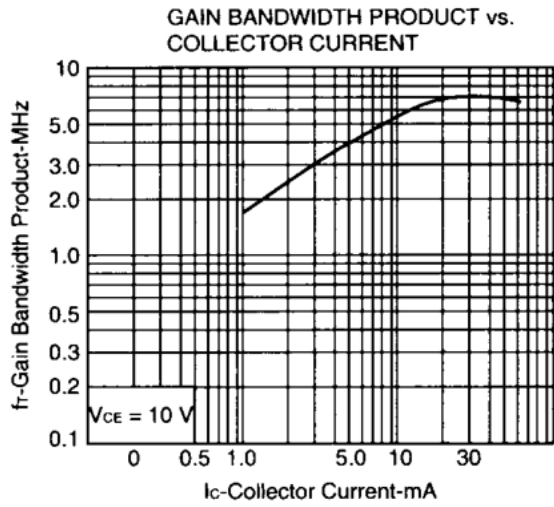
参数符号	测试条件	最小值	最大值	单位
I_{CB0}	$V_{CB}=10\text{V}$ $I_E=0$		1.0	μA
I_{CEO}	$V_{CE}=12\text{V}$ $I_B=0$		1.0	μA
I_{EBO}	$V_{EB}=1\text{V}$ $I_C=0$		90	nA
H_{FE}	$V_{CE}=10\text{V}$ $I_C=20\text{mA}$	80	280	
f_T	$V_{CE}=10\text{V}$ $I_C=20\text{mA}$	TYP: 7.0		GHz
C_{re}	$V_{CB}=10\text{V}$ $I_E=0$ $f=1\text{MHz}$		1.0	pF
F	$V_{CE}=10\text{V}$ $I_C=7\text{mA}$ $f=1.0\text{GHz}$		2.0	dB

● H_{FE} 分档

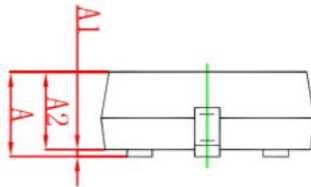
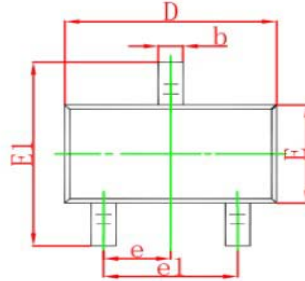
Rank	A	B	C
H_{FE}	80~140	130~250	240~280

● 典型特征曲线 (TA=25°C)





● DIMENTION SOT-23 外形封装尺寸



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°