

● 硅 NPN 外延平面三极管

● 用途:

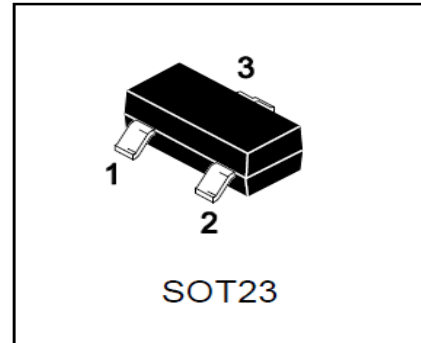
通用放大、开关

● 特点:

低电流

高电压

与 MMBT5401 构成互补对管



MARKING: G1

PIN: 1、B, 2、E, 3、C

● 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	300
集电极电流	I_c	mA	600
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_{CBO}	V	180
集电极-发射极电压	V_{CEO}	V	160
发射极-基极电压	V_{EBO}	V	6

● 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
V_{CBO}	$I_c=0.1\text{mA}$ $I_E=0$	180		V
V_{CEO}	$I_c=1\text{mA}$ $I_B=0$	160		V
V_{EBO}	$I_E=0.01\text{mA}$ $I_c=0$	6		V
I_{CBO}	$V_{CB}=120\text{V}$ $I_E=0$		50	nA
I_{EBO}	$V_{EB}=3\text{V}$ $I_c=0$		50	nA
H_{FE}	$V_{CE}=5\text{V}$ $I_c=10\text{mA}$	100	350	
$V_{CE(sat)}$	$I_c=50\text{mA}$ $I_B=5\text{mA}$		0.5	V
$V_{BE(sat)}$	$I_c=50\text{mA}$ $I_B=5\text{mA}$		1	V
f_T	$V_{CE}=5\text{V}$ $I_c=10\text{mA}$ $f=30\text{MHz}$	100		MHz

● H_{FE} 分档

Rank	L	H
H_{FE}	100-250	220-350

● 典型曲线图

Fig.1 Collector Output Capacitance

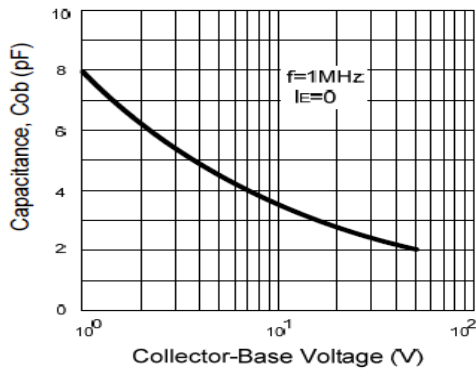


Fig.2 DC Current Gain

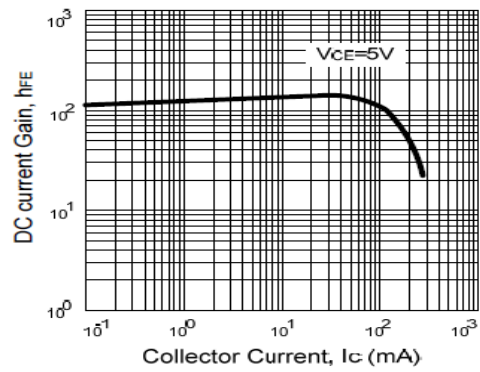


Fig.3 Base-Emitter on Voltage

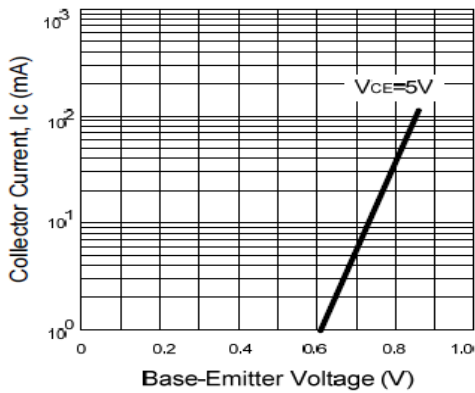


Fig.4 Saturation Voltage

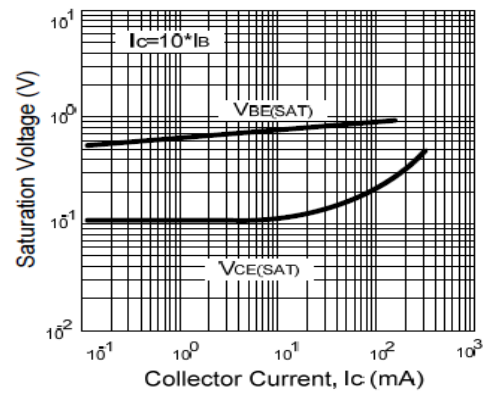
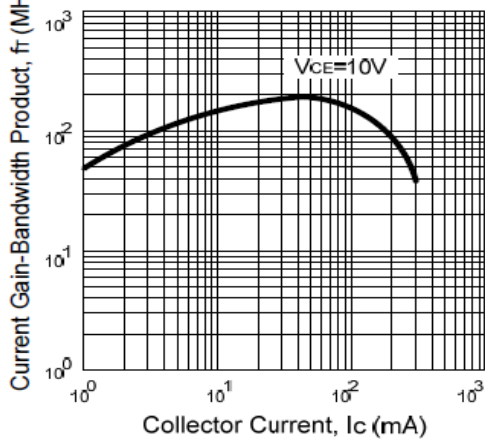
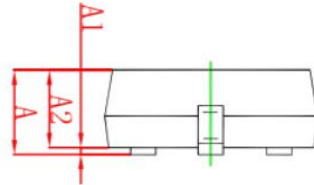
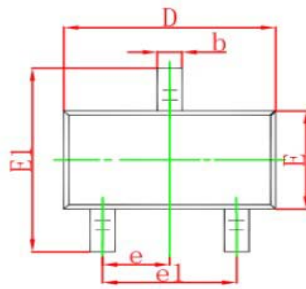


Fig.5 Current Gain-Bandwidth Product



● SOT-23 封装外形尺寸



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°