



.....67, %±

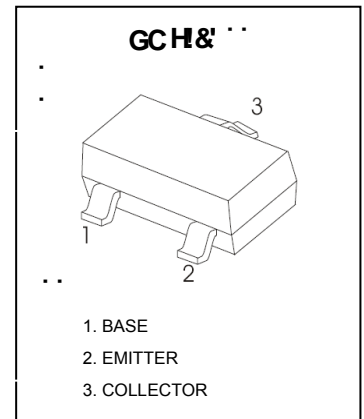
GCH& `D`UghjW9bWUdgi `UH`HfUbgjghc f g (NPN)

95HI F9G

- For general AF applications
- High collector current
- High current gain
- Low collector-emitter saturation voltage
- Complementary types: BC807 (PNP)

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	50	V
V _{CEO}	Collector-Emitter Voltage	45	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current	500	mA
P _C	Collector Power Dissipation	300	mW
R _{θJA}	Thermal Resistance From Junction To Ambient	417	°C/W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

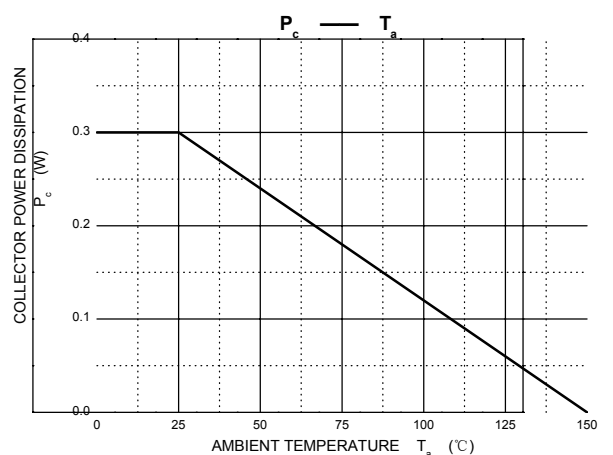
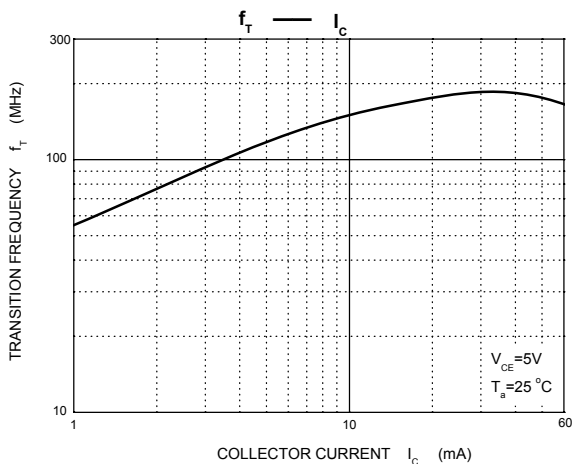
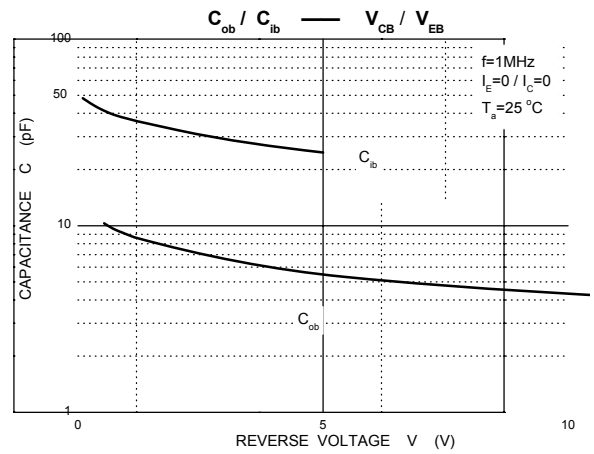
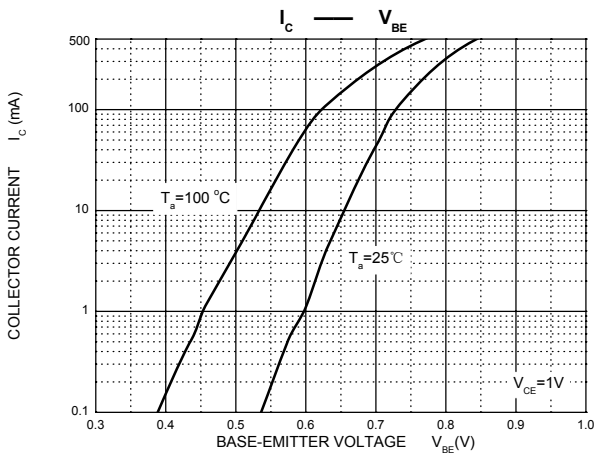
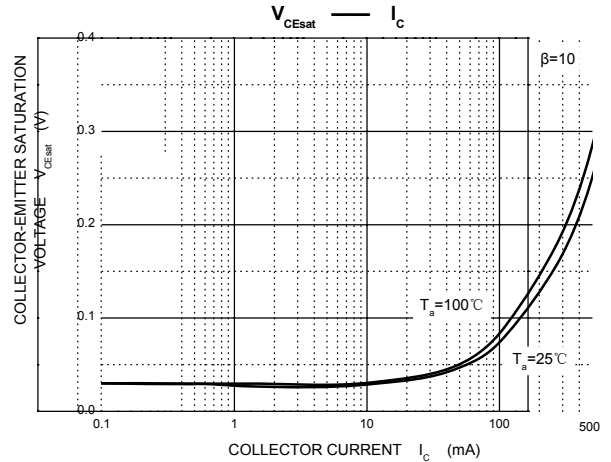
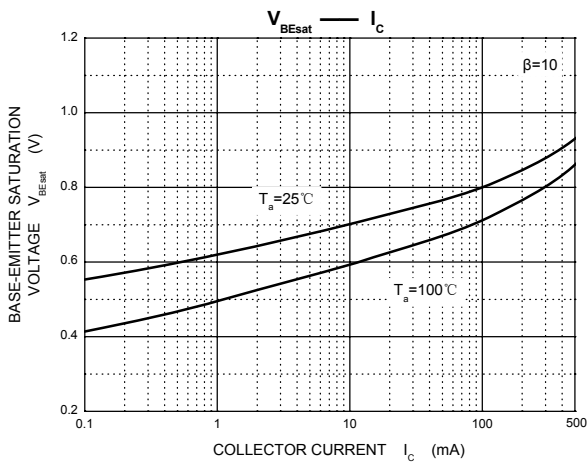
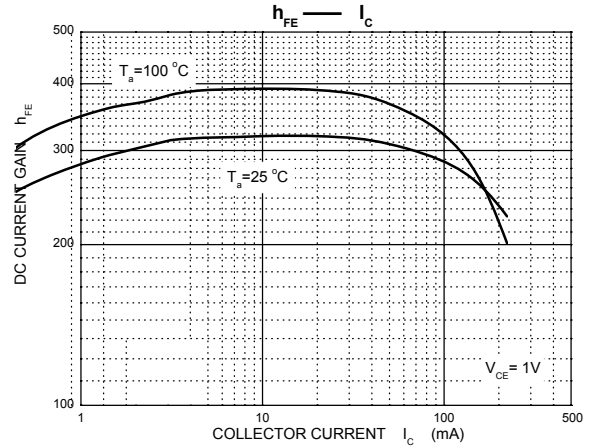
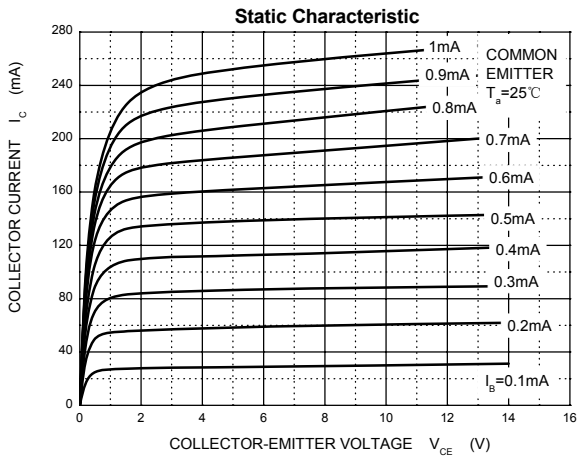


9 @ 7 HF = 5 @ 7 < 5 F 5 7 H9 F = GH = 7 G' f h a 1 &) °C' i b`Ygg' c h Y f k j g Y g d Y W Z Y X L`

..... DUfUa Yhf`	Gma Vc`	HYgh VtbX]hcbg`	A in	Typ`	A ax	Unit
7 c`YWcf!VUgY V f YU_Xck b'j c`HU] Y`	V _{CB0}	I _C = 10μA, I _E =0	50			V
7 c`YWcf!Ya]HfY`VfYU_Xck b'j c`HU] Y`	V _{CEO}	I _C = 10mA, I _B =0	45			V
9 a]HfY!VUgY V f YU_Xck b'j c`HU] Y`	V _{EBO}	I _E = 1μA, I _C =0	5			V
7 c`YWcf`W HcZZW ffYbh	I _{CB0}	V _{CB} = 45 V, I _E =0			0.1	μA
9 a]HfY`W HcZZW ffYbh	I _{EBO}	V _{EB} = 4V, I _C =0			0.1	μA
8 7 `W ffYbh] Ujb`.....	h _{FE(1)}	V _{CE} = 1V, I _C = 100mA	100		600	
	h _{FE(2)}	V _{CE} = 1V, I _C = 500mA	40			
7 c`YWcf!Ya]HfY`gUhi fUH]cb'j c`HU] Y`	V _{CE(sat)}	I _C = 500mA, I _B = 50mA			0.7	V
6 UgY!Ya]HfY`gUhi fUH]cb'j c`HU] Y`	V _{BE(sat)}	I _C = 500mA, I _B = 50mA			1.2	V
6 UgY!Ya]HfY`j c`HU] Y`	V _{BE}	V _{CE} = 1 V, I _C = 500mA			1.2	V
7 c`YWNf`WUdUWf]UbW`	C _{ob}	V _{CB} =10V, f=1MHz		10		pF
HfUbg]hcb`Z`Yei YbWni	f _T	V _{CE} = 5 V, I _C = 10mA f=100MHz	100			MHz

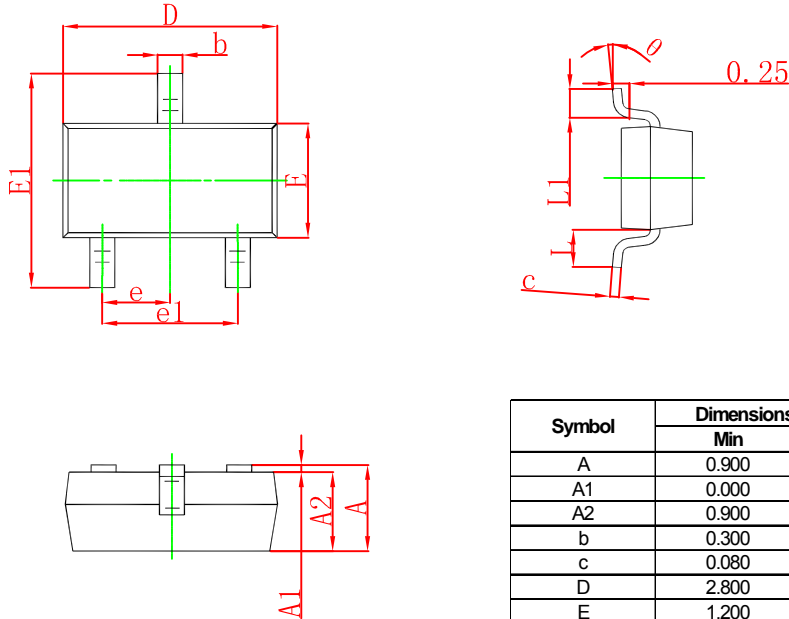
7 @ GG = 7 5 HCB`C: `hFE`%

FUb`	6 7, %±!%`	6 7, %±!&`	6 7, %±!(\$`
FUb] Y`	%%\$!&` \$`	% \$!(\$ \$`	&) \$!* \$ \$`
AUf_]b[`	* 5`	* 6`	* 7`



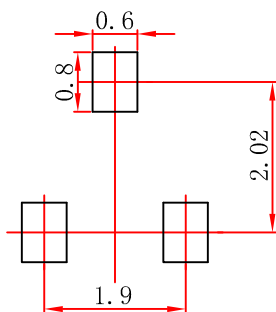


SOT-23 Package Outline Dimensions



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°

SOT-23 Suggested Pad Layout



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