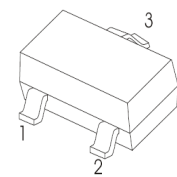


NPN Silicon Epitaxial Planar Transistors

95HI F9G

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

GCH& ' ' '



- 1. BASE
- 2. EMITTER
- 3. COLLECTO

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

Symbol	Parameter	Value	Unit
V _{CBO}	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

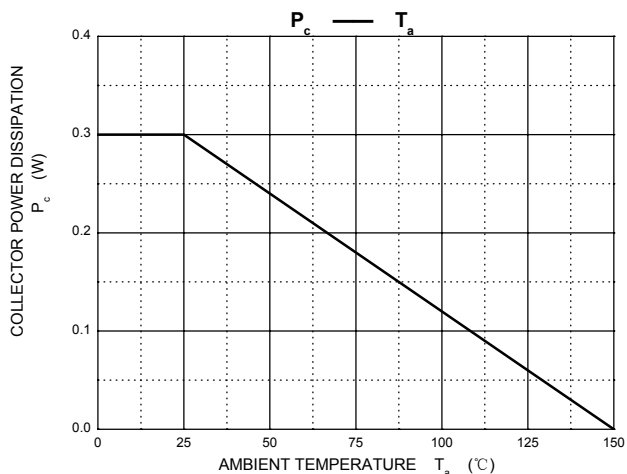
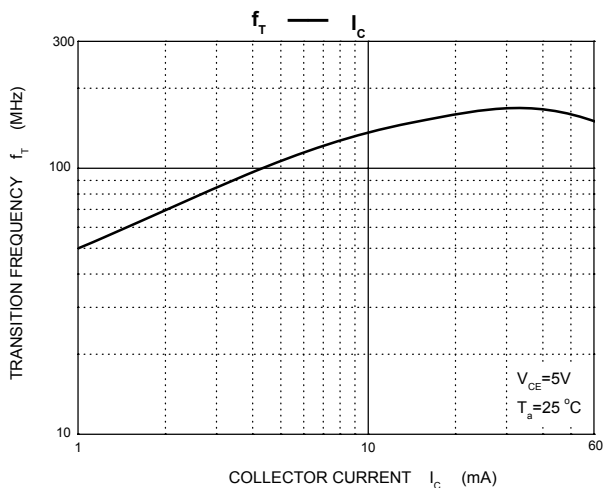
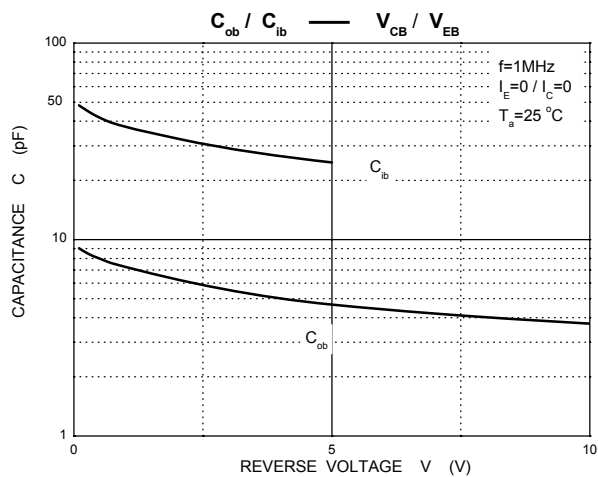
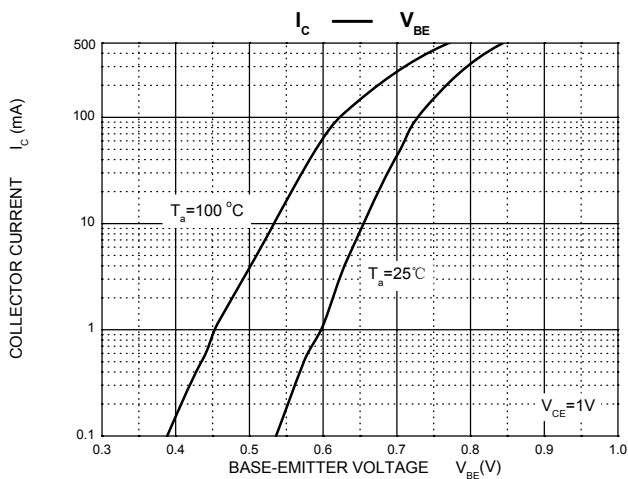
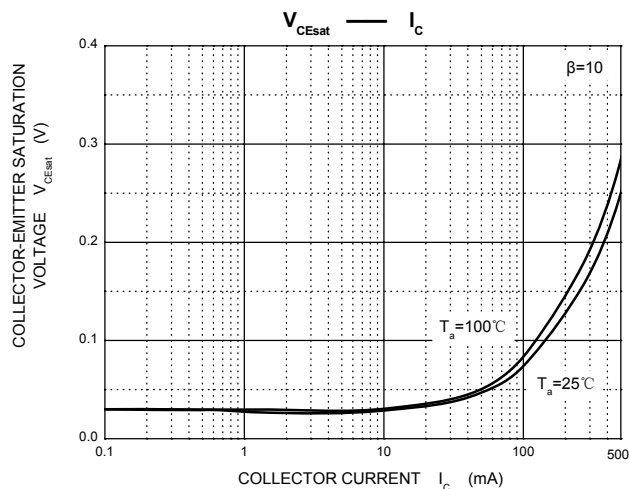
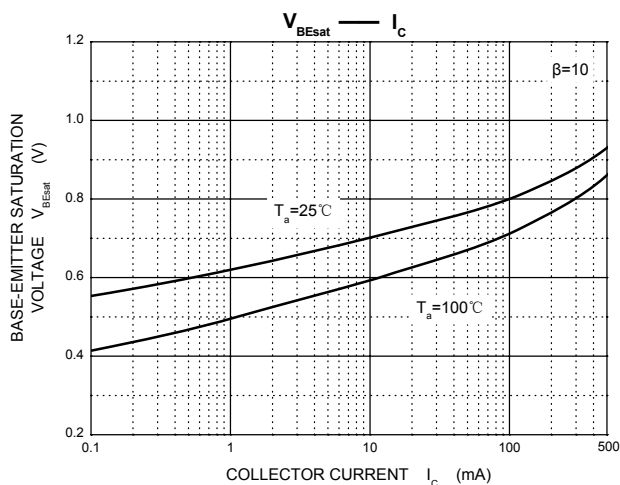
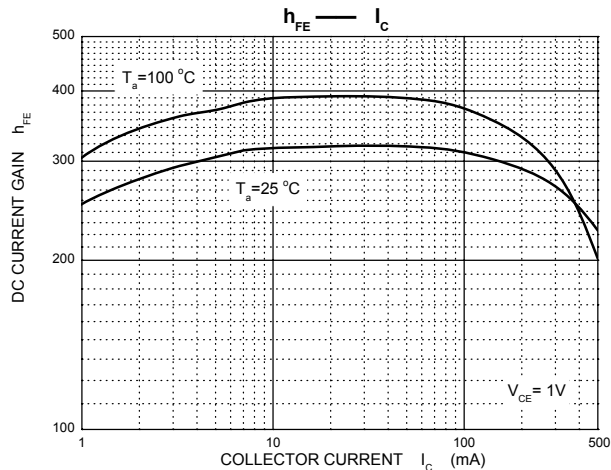
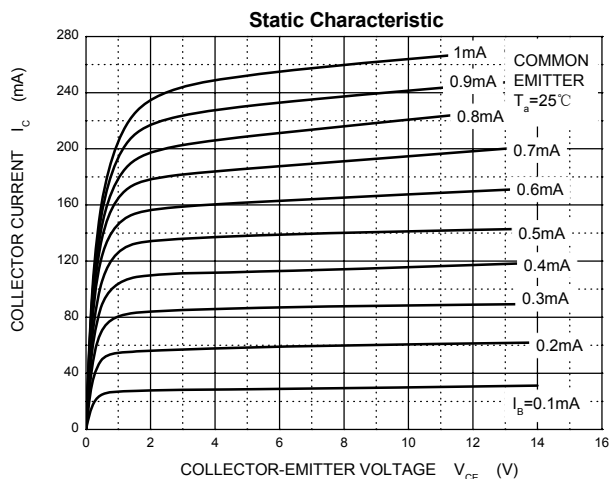
9 @ 7 HF 7 5 @ 7 < 5 F 5 7 H 9 F - GH 7 G f H 1 &) ° C i b` Ygg` c H Yfk jgY gdYW ZYXL`

DUFLa YHf`	Gna Vc`	HYghi WcbX]jcbg`	Ain	Typ`	Aax	Unit
7 c`YWfcf!VUgY VfYU_Xck b`j c`HU] Y`	V _{CBO}	I _C = 10μA, I _E = 0	50			V
7 c`YWfcf!Ya]HfY`VfYU_Xck b`j c`HU] Y`	V _{CEO}	I _C = 10mA, I _B = 0	45			V
9a]HfY!VUgY VfYU_Xck b`j c`HU] Y`	V _{EBO}	I _E = 1μA, I _C = 0	5			V
7 c`YWfcf`W HcZWW ffYbh	I _{CBO}	V _{CB} = 45 V, I _E = 0			0.1	μA
9a]HfY`W HcZWW ffYbh	I _{EBO}	V _{EB} = 4V, I _C = 0			0.1	μA
8 7 `W ffYbh[U]b`	h _{FE(1)}	V _{CE} = 1V, I _C = 100mA	100		600	
	h _{FE(2)}	V _{CE} = 1V, I _C = 500mA	40			
7 c`YWfcf!Ya]HfY`gUH fUH]cb`j c`HU] Y`	V _{CE(sat)}	I _C = 500mA, I _B = 50mA			0.7	V
6 UgY!Ya]HfY`gUH 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`YWFYf`WUdUW]UW`W`	C _{ob}	V _{CB} = 10V, f = 1MHz		10		pF
HfUbg]jcb`Z`Yei`YbWni	f _T	V _{CE} = 5 V, I _C = 10mA f = 100MHz	100			MHz

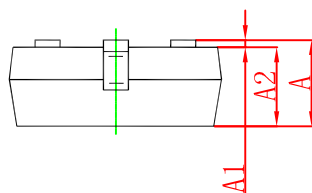
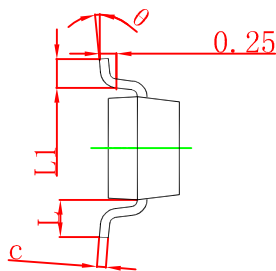
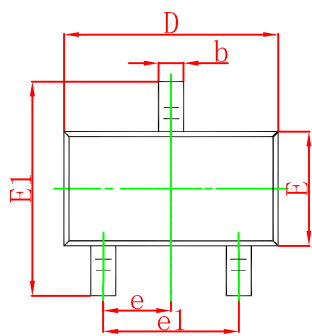
7 @ GG= 7 5 HCB`C: ` hFE`rk`

FUb`	67, %+!%`	67, %+!&`	67, %+!(\$`
FUb[Y`	%%\$!&) \$`	% \$(\$ \$`	&) \$!*\$ \$ \$`

Typical Characteristics



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°