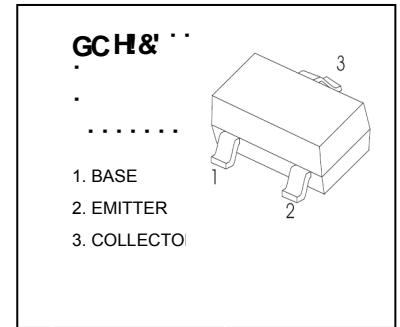


GCH& 'D' UghjW9 bWUdgi 'UHY' Hf Ubg]ghc'fg'
95HI F9G'

- For general AF applications
- High collector current
- High current gain
- Low collector-emitter saturation voltage
- Complementary types: TKBC807 (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

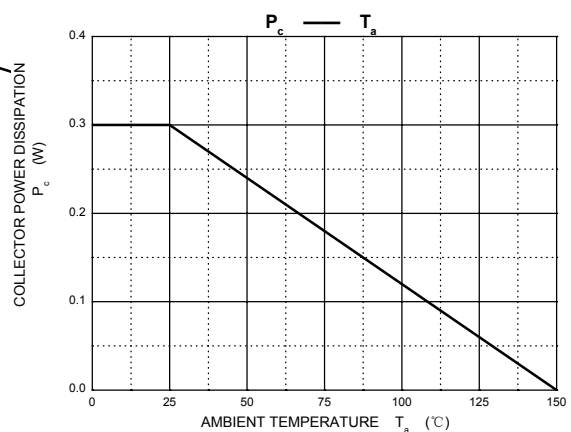
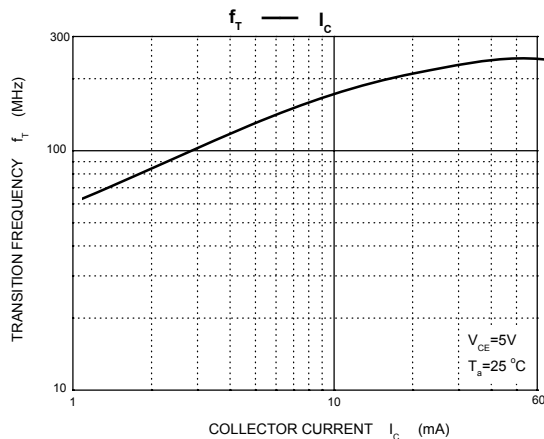
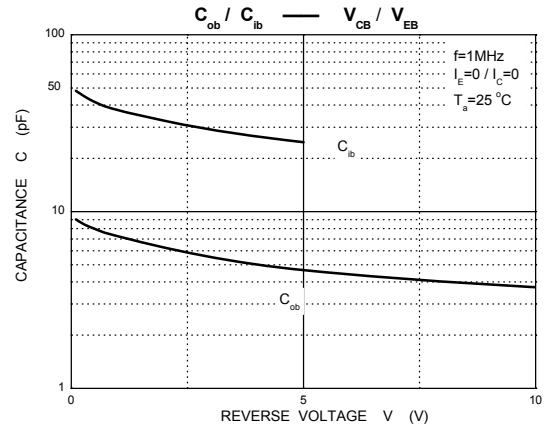
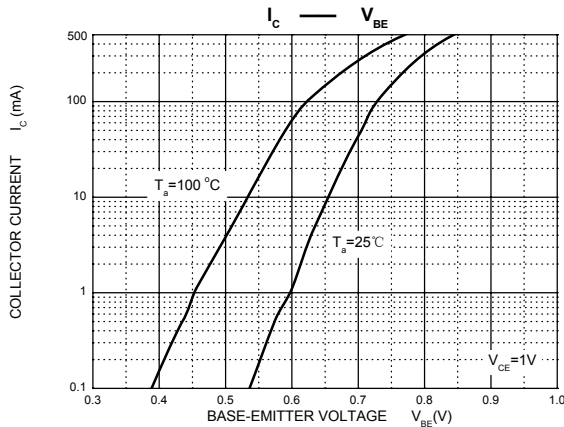
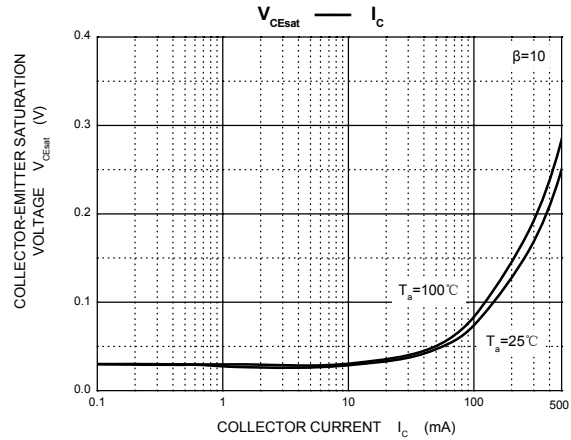
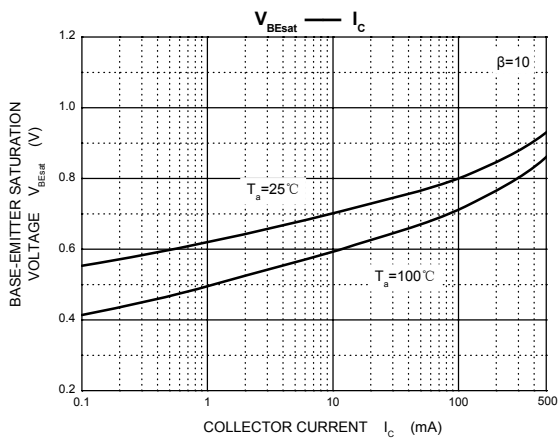
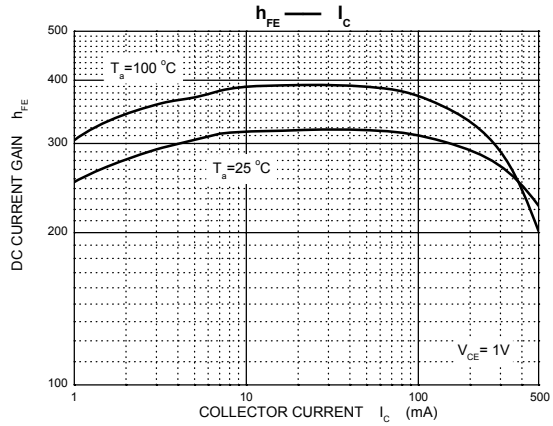
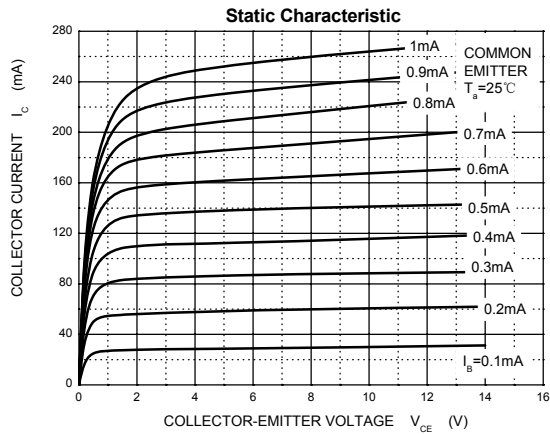
9 @ 7 HF 7 5 @ 7 < 5 F 5 7 H 9 F -GH 7 G' fH 1 &) °C i b`Ygg' cH Yfk]gY' gdYW]Z]YXL'

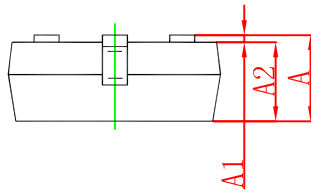
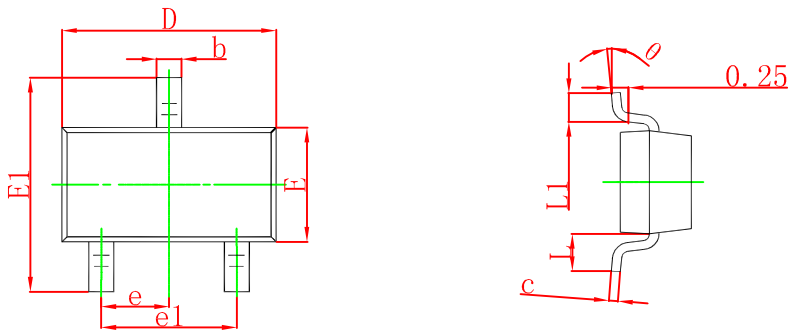
Parameter	Symbol	Value	A in	Typ	A ax	Unit
Collector-Base Voltage	V _{CB0}	I _C = 10μA, I _E = 0	50			V
Collector-Emitter Voltage	V _{CEO}	I _C = 10mA, I _B = 0	45			V
Emitter-Base Voltage	V _{EBO}	I _E = 1μA, I _C = 0	5			V
Collector-Base Saturation Current	I _{CB0}	V _{CB} = 45 V, I _E = 0			0.1	μA
Emitter-Base Saturation Current	I _{EBO}	V _{EB} = 4V, I _C = 0			0.1	μA
Current Gain	h _{FE(1)}	V _{CE} = 1V, I _C = 100mA	100		600	
		V _{CE} = 1V, I _C = 500mA	40			
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C = 500mA, I _B = 50mA			0.7	V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C = 500mA, I _B = 50mA			1.2	V
Base-Emitter Voltage	V _{BE}	V _{CE} = 1 V, I _C = 500mA			1.2	V
Output Capacitance	C _{ob}	V _{CB} = 10V, f = 1MHz		10		pF
Transition Frequency	f _T	V _{CE} = 5 V, I _C = 10mA f = 100MHz	100			MHz

7 @ GG= 7 5 H-CB'C: h_{FE}'%

F _{ub}	67, %!	67, %!&)	67, %!(\$'
F _{ub} [Y	%%\$!&) \$'	%\$!(\$ \$'	&) \$!* \$ \$'
A _U [b]	* 5	* 6	* 7

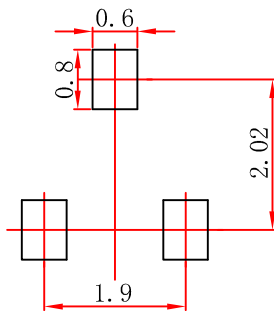
Typical Characteristics





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: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.