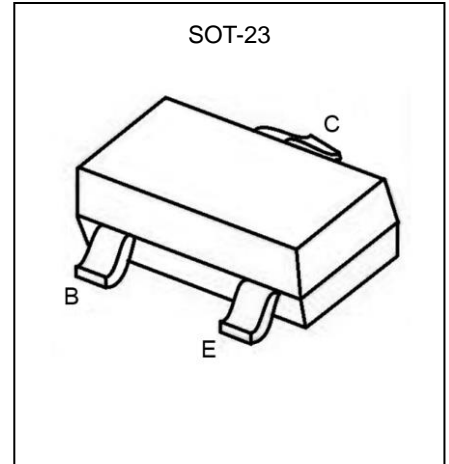




BC817 Transistor(NPN)

Feature

- For general AF applications
- High collector current
- High current gain
- Complementary type: BC807(PNP)



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

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CBO}	50	V
Collector-Emitter Voltage	V _{CEO}	45	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current -Continuous	I _c	0.5	A
Power Dissipation	P _d	0.3	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55~ +150	°C

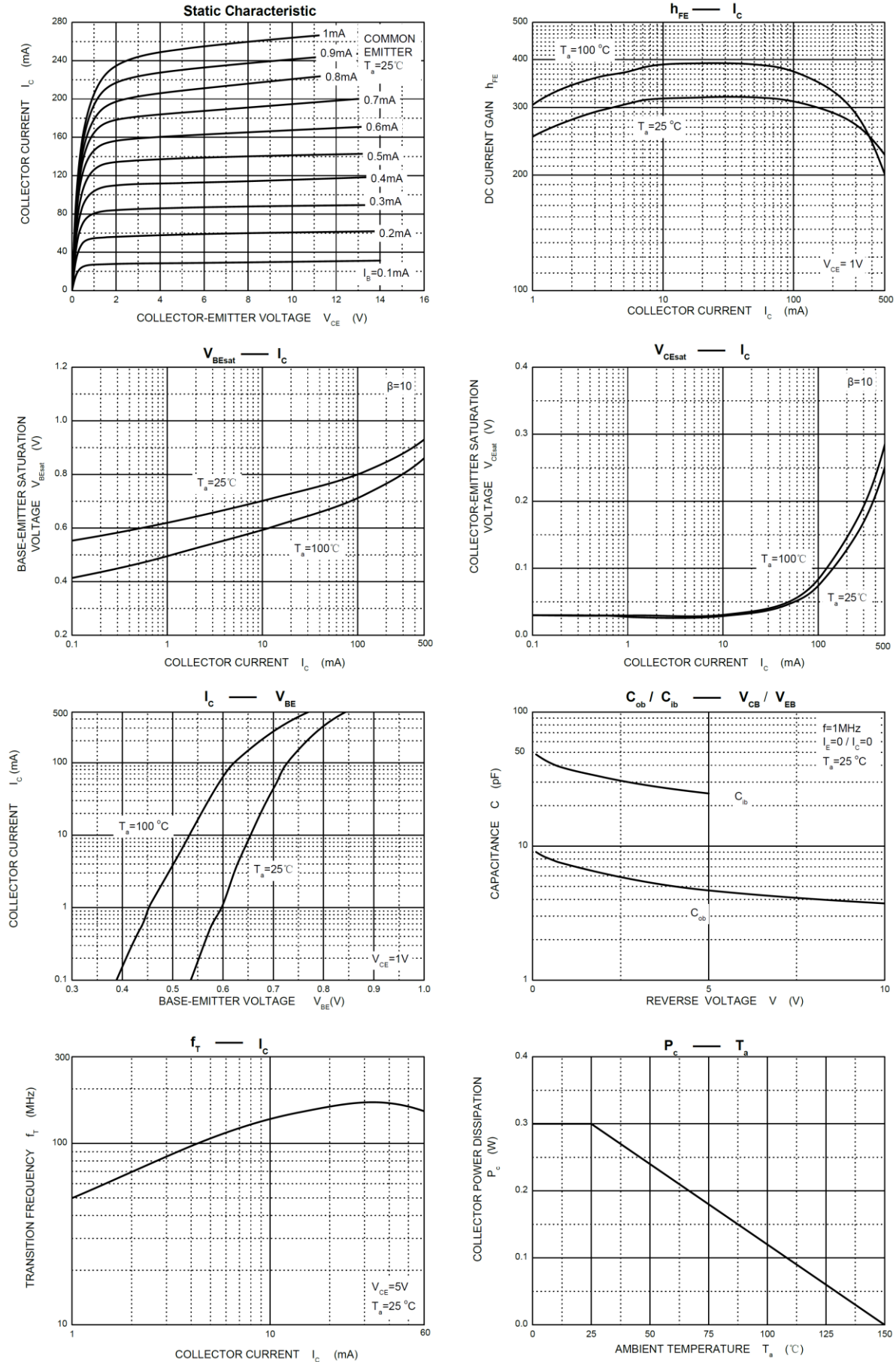
ELECTRICAL CHARACTERISTICS(T_a=25°C unless otherwise noted)

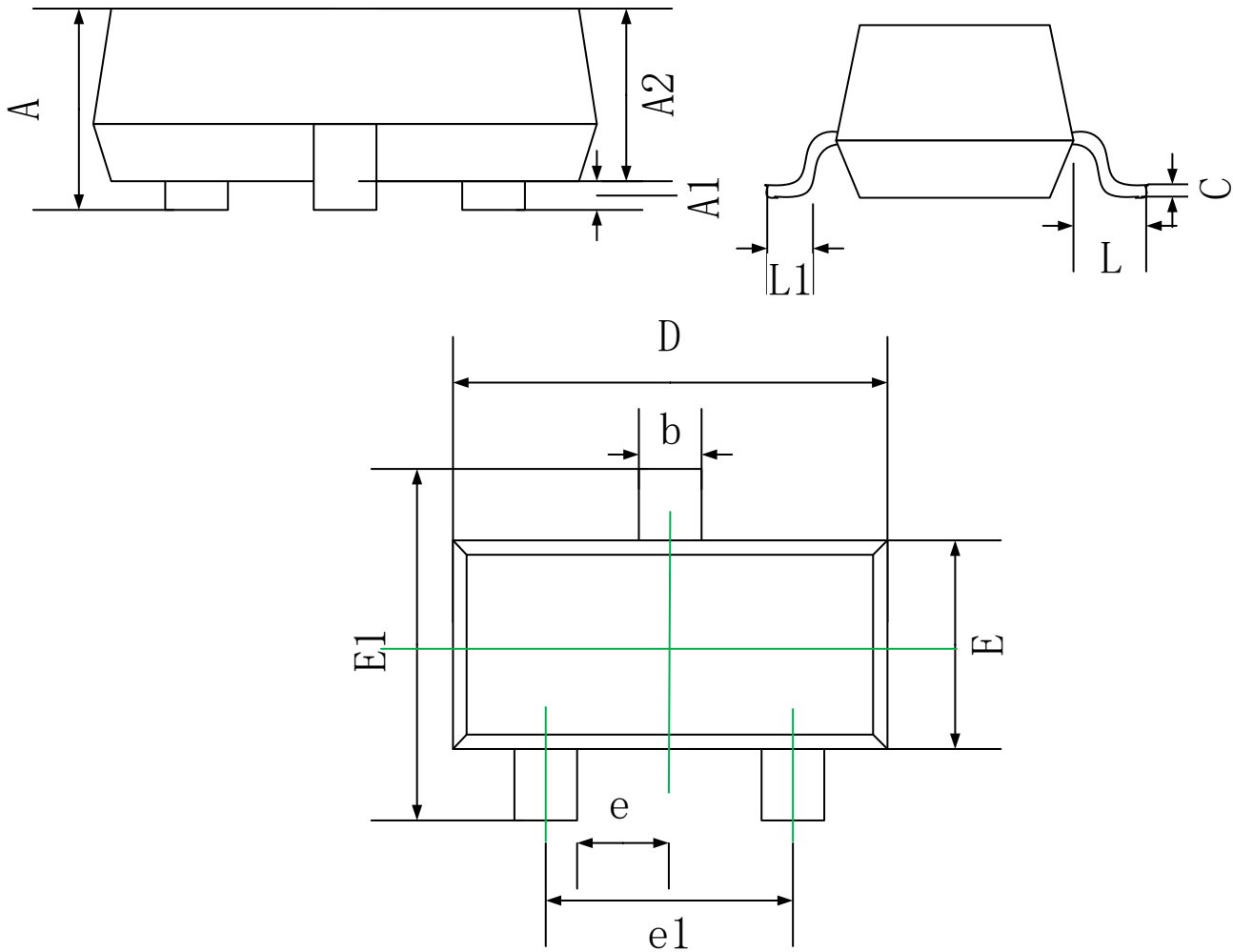
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _c =10μA , I _E =0	50			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _c =10mA , I _B =0	45			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =1μA, I _c =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} =45V, I _E =0			0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =4V, I _c =0			0.1	μA
DC current gain	h _{FE1}	V _{CE} =1V, I _c =100mA	100		600	
	h _{FE2}	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			1.1	V
Transition frequency	f _T	V _{CE} =5V, I _c =10mA, f =100MHz	100			MHZ
Input capacitance	C _{OB}	V _{CB} =10V, I _E =0, f=1MHz		10		pF

Classification of h_{FE1}

Rank	BC817-16	BC817-25	BC817-40
Range	100~250	160~400	250~600
Marking	6A	6B	6C

Typical Characteristics



SOT-23 Package Information


Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.90	1.15
A1	0.00	0.10
A2	0.90	1.05
b	0.30	0.50
c	0.08	0.15
D	2.80	3.00
E	1.20	1.40
E1	2.25	2.55
e	0.95 REF.	
e1	1.80	2.00
L	0.55 REF.	
L1	0.30	0.50