

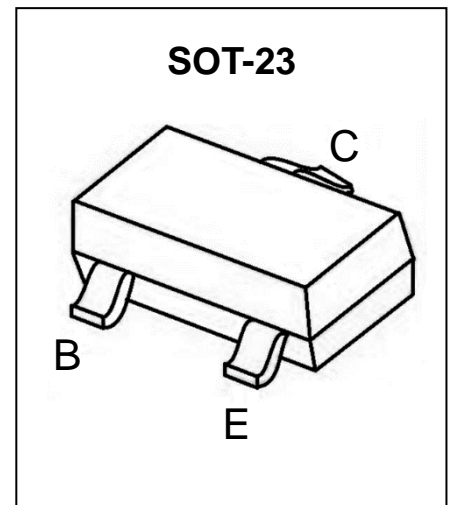


BC846A Transistor(NPN)

Feature

- Ideally suited for automatic insertion
- For Switching and AF Amplifier Applications

Marking: 1A



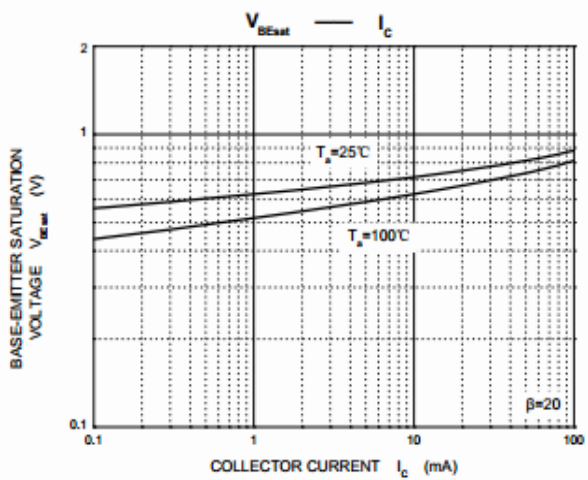
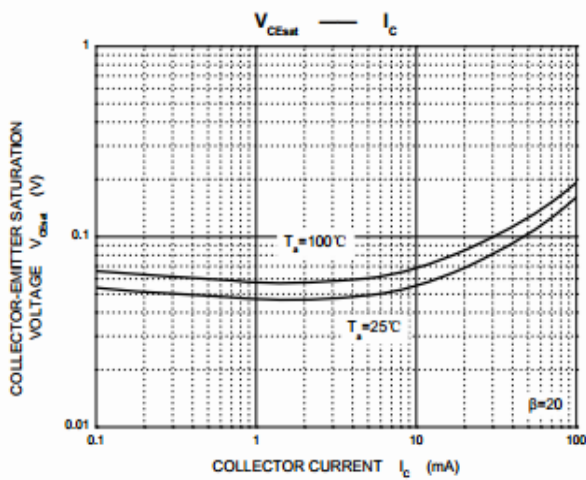
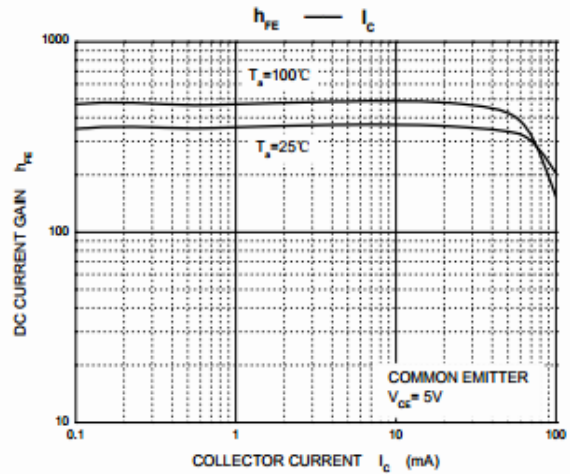
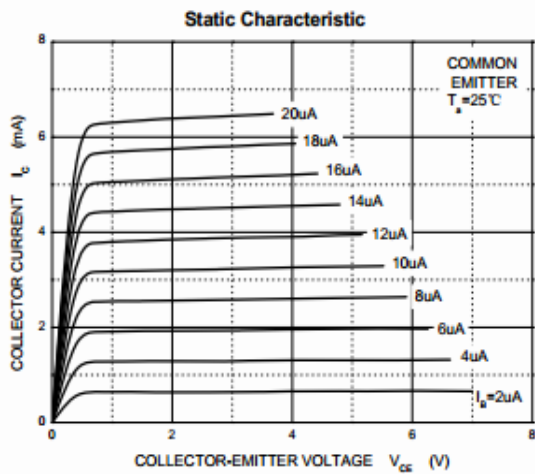
MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

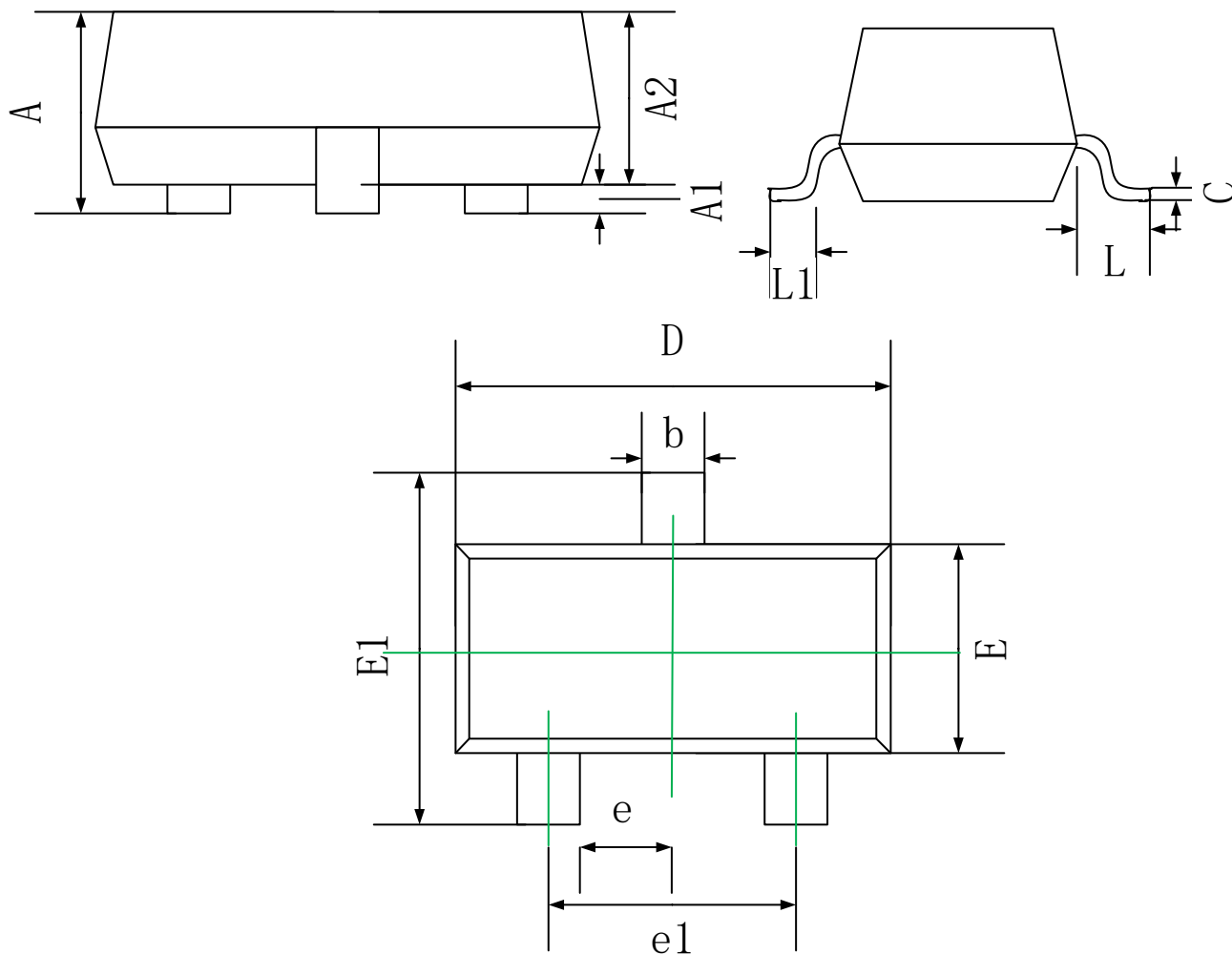
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CB0}	50	V
Collector-Emitter Voltage	V _{CE0}	45	V
Emitter-Base Voltage	V _{EB0}	5	V
Collector Current -Continuous	I _c	0.1	A
Collector Power Dissipation	P _c	0.2	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55~ +150	°C

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 =100μA, I _E =0	50			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _c =1mA, I _B =0	45			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100μA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} =40V, I _E =0V			100	nA
Collector cut-off current	I _{CEO}	V _{CE} =40V, I _B =0V			100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =5V, I _C =0V			100	nA
DC current gain	h _{FE}	V _{CE} =5V, I _c =1mA	100		300	
Collector-emitter saturation voltage	V _{CE(sat)}	I _c =100mA, I _B = 5mA			0.3	V
Base-emitter saturation voltage	V _{BE(sat)}	I _c =100mA, I _B = 5mA			1.1	V
Transition frequency	f _T	V _{CE} = 5V, I _c =10mA, f =30MHz	150			MHZ

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