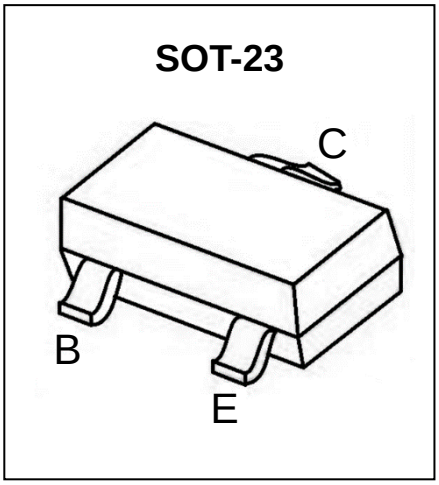
BC846B

Plastic-Encapsulate Transistors

BC846B Transistor(NPN)



Feature

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

Marking： 1B

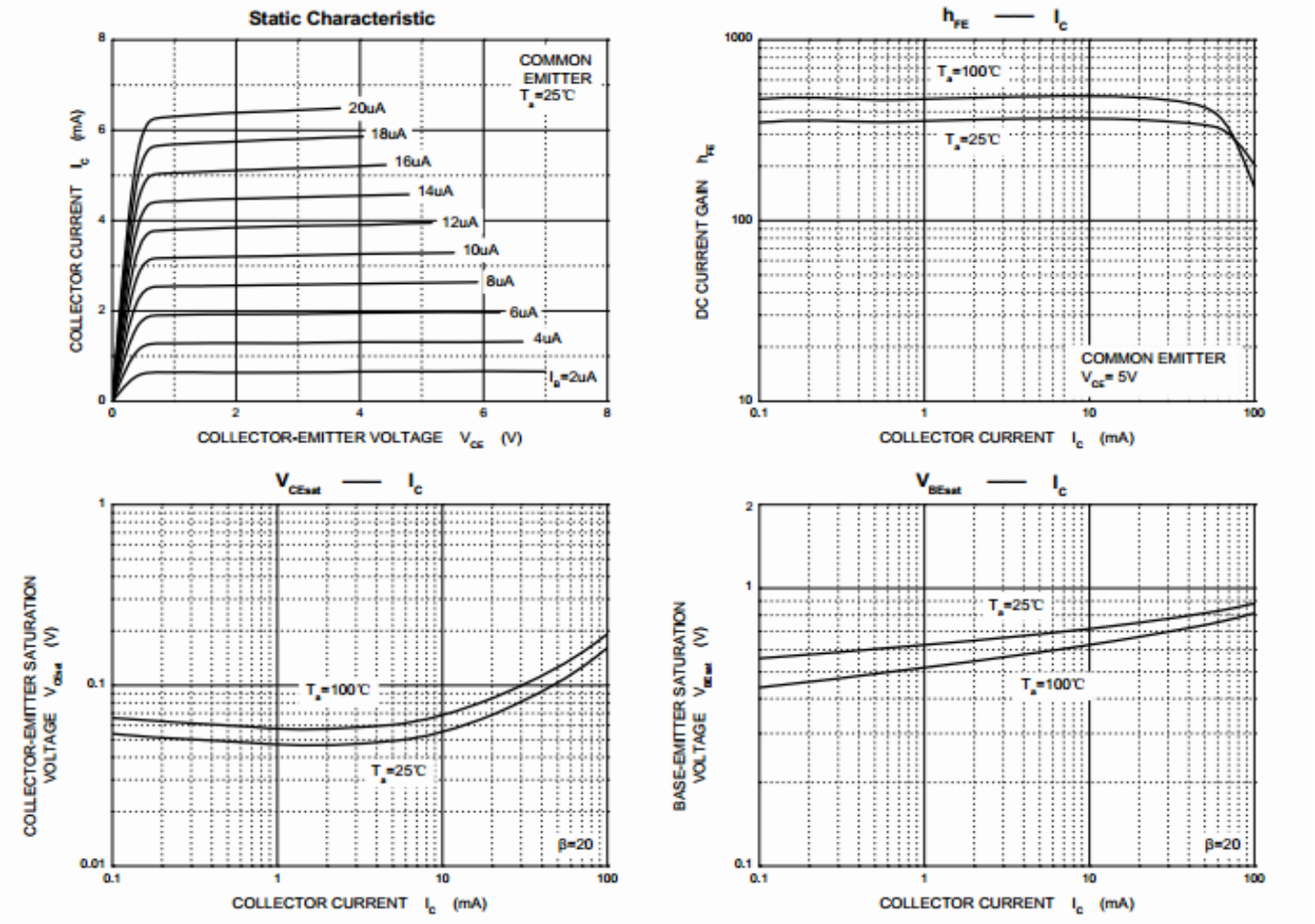
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

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	0.1	A
Collector Power Dissipation	P_C	0.2	W
Junction Temperature	T_J	150	℃
Storage Temperature	T_{STG}	-55~ +150	℃

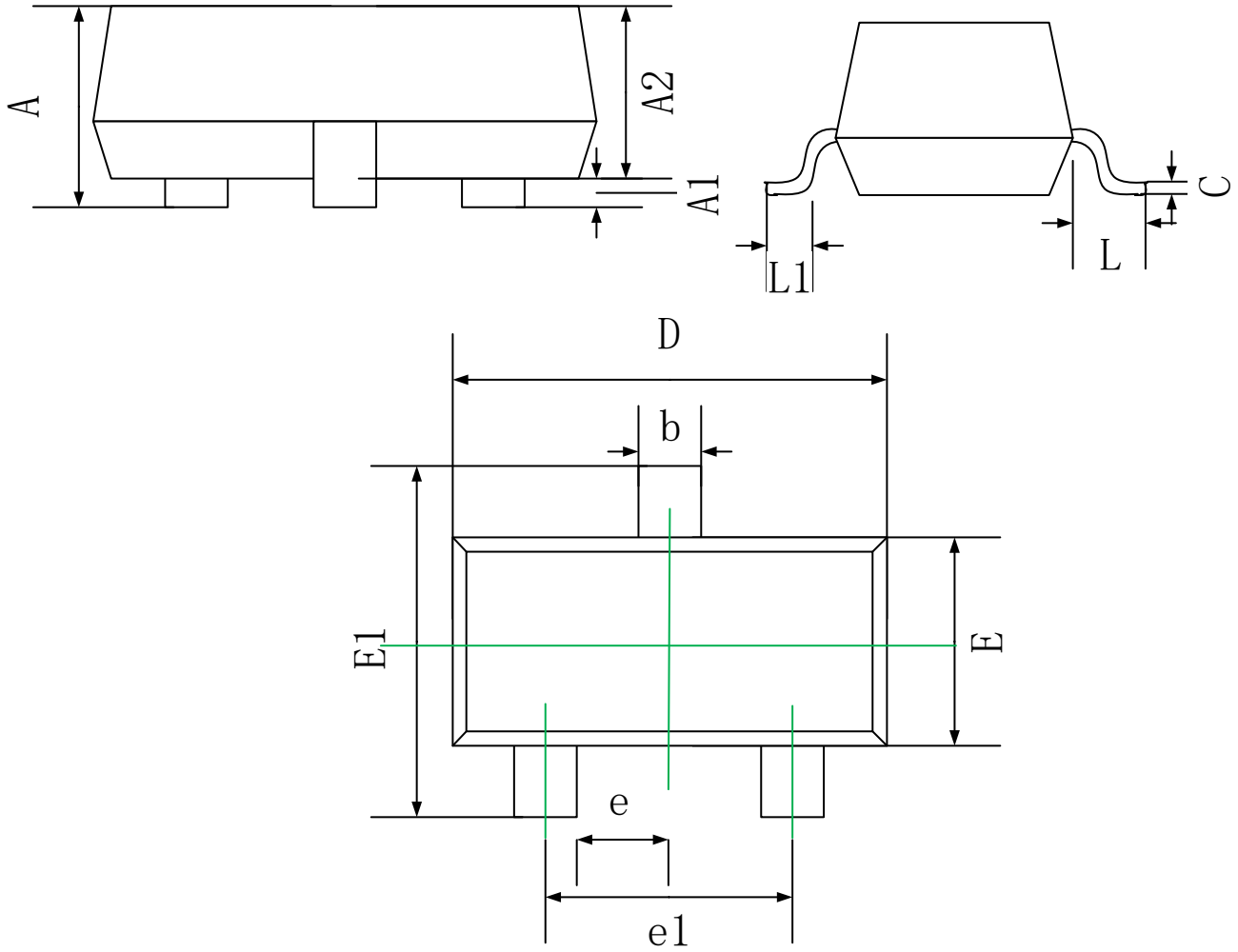
ELECTRICAL CHARACTERISTICS(T_a=25℃ unless otherwise noted)

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	300		400	
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	0.900	1.150
A1	0.000	0.125
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.9500 REF.	
e1	1.80	2.000
L	0.550 REF.	
L1	0.30	0.50