



BC846 BC847 BC848 Transistor(NPN)

Feature

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

Marking:

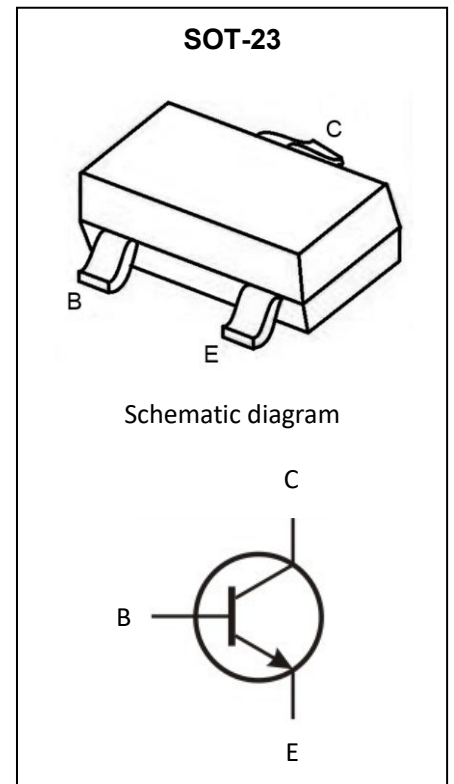
BC846A=1A;BC846B=1B;

BC847A=1E;BC847B=1F;BC847C=1G;

BC848A=1J;BC848B=1K;BC848C=1L

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

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CB0}	BC846	80
		BC847	50
		BC848	30
Collector-Emitter Voltage	V _{CEO}	BC846	65
		BC847	45
		BC848	30
Emitter-Base Voltage	V _{EBO}	6	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

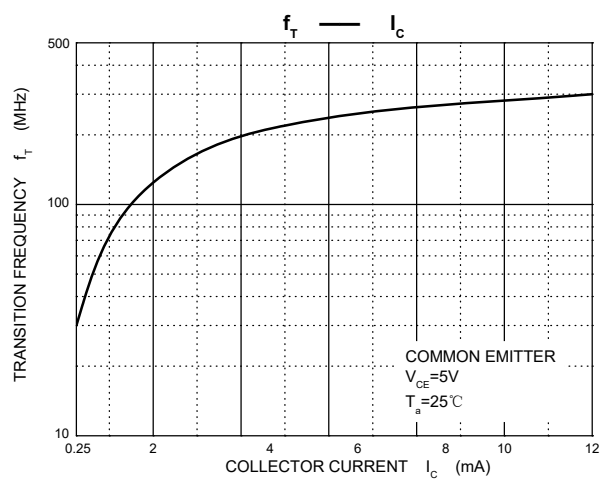
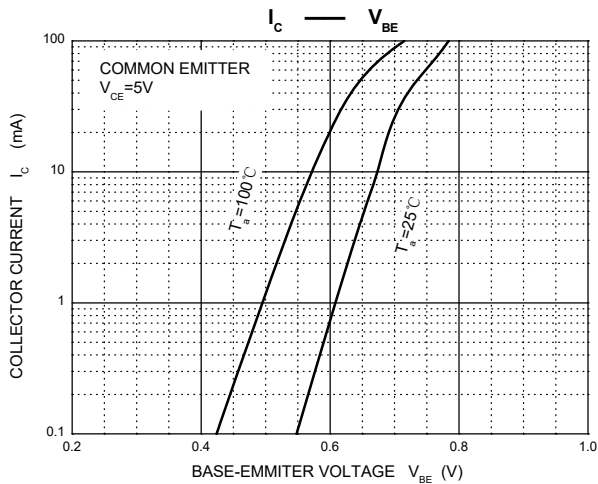
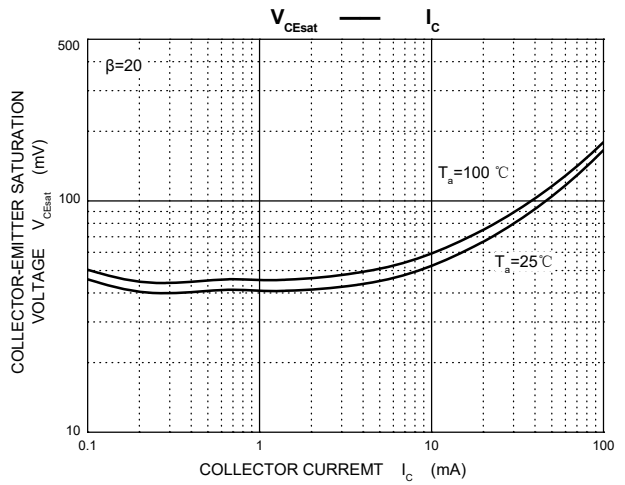
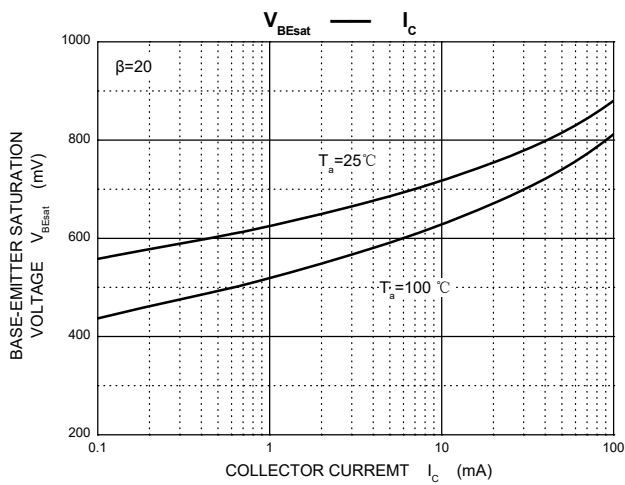
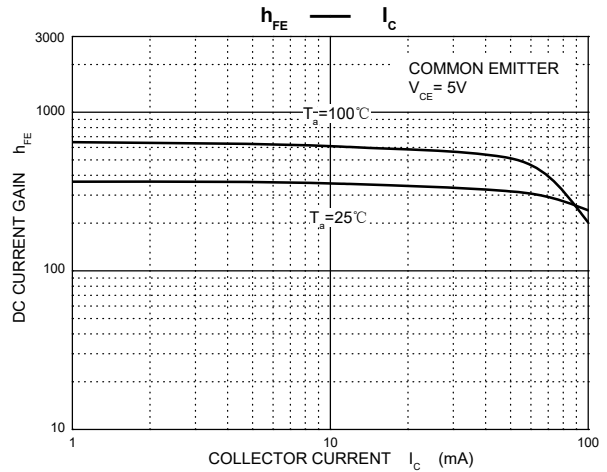
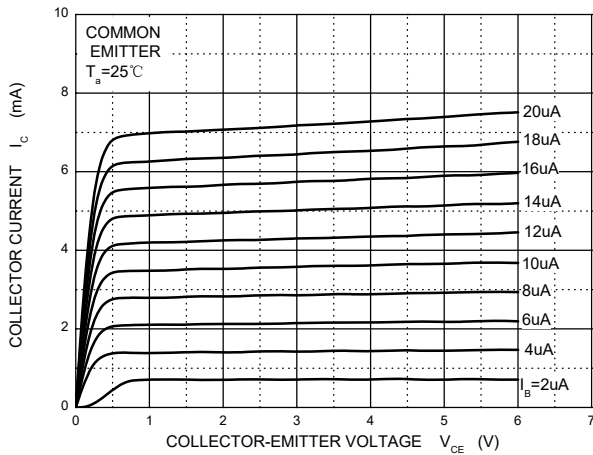


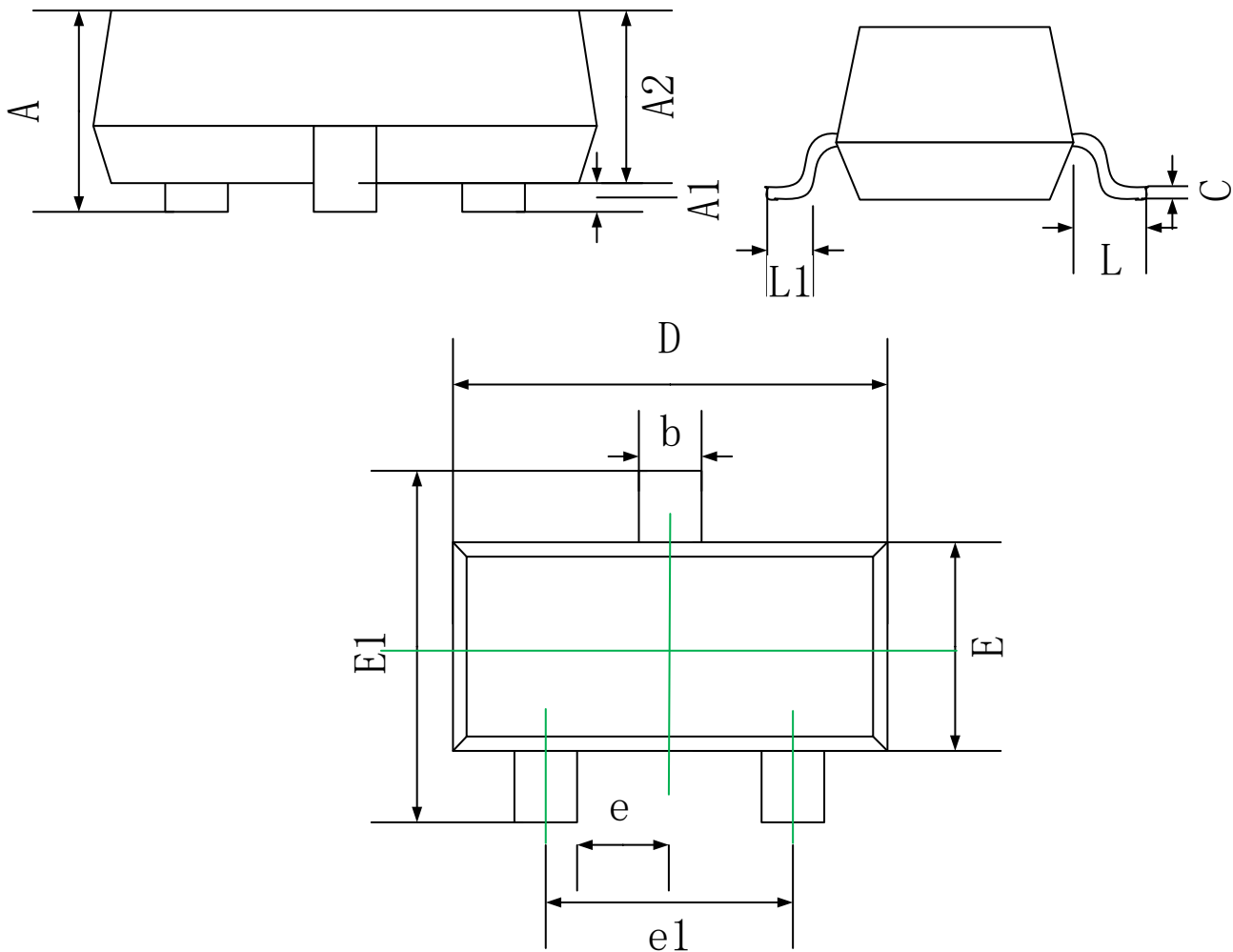
ELECTRICAL CHARACTERISTICS(T_a=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage						
BC846	V _{(BR)CBO}	I _c =10μA , I _E =0	80			V
BC847			50			
BC848			30			
Collector-emitter breakdown voltage						
BC846	V _{(BR)CEO}	I _c =10mA , I _B =0	65			V
BC847			45			
BC848			30			
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =10μA, I _C =0	6			V
Collector cut-off current						
BC846	I _{CBO}	V _{CB} =70V, I _E =0			100	nA
BC847			V _{CB} =50V, I _E =0			
BC848			V _{CB} =30V, I _E =0			
Collector cut-off current	I _{EBO}	V _{EB} =5V, I _C =0			100	nA
DC current gain						
BC846A,847A,848A	h _{FE}	V _{CE} =5V, I _C =2mA	110		220	
BC846B,847B,848B			200		450	
BC847C,848C			420		800	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =100mA, I _B = 5mA			0.5	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 =100MHz	100			MHz
Collector capacitance	C _{ob}	V _{CB} = 10V, f=1MHz			4.5	pF

Typical Characteristics

Static Characteristic



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