

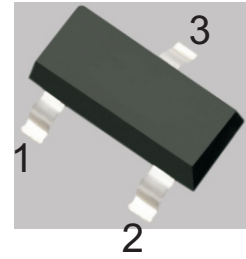


BC846 BC847 BC848
NPN TRANSISTOR

FEATURES

- Ideally suited for automatic insertion
- For switching and AF amplifier applications

SOT-23



1.BASE
2.EMITTER
3.COLLECTOR

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

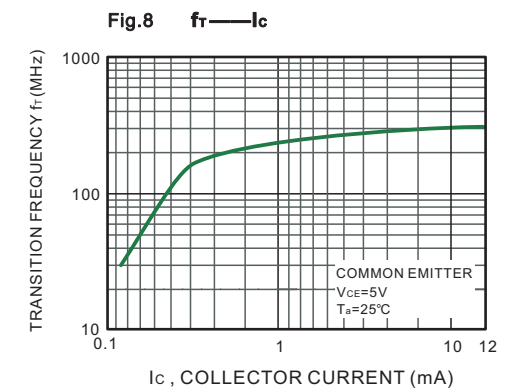
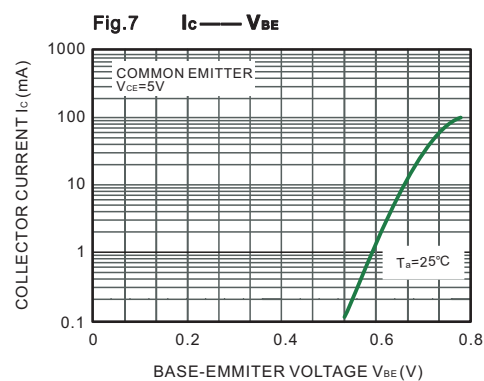
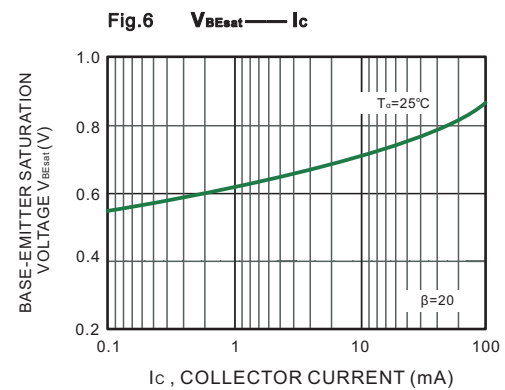
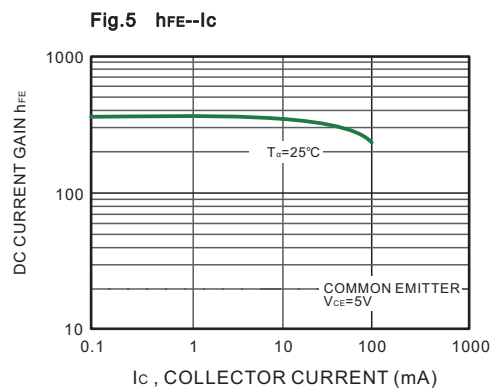
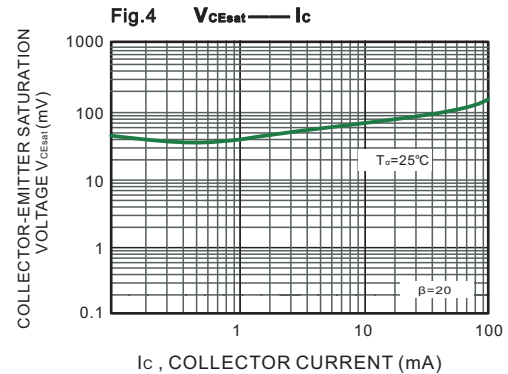
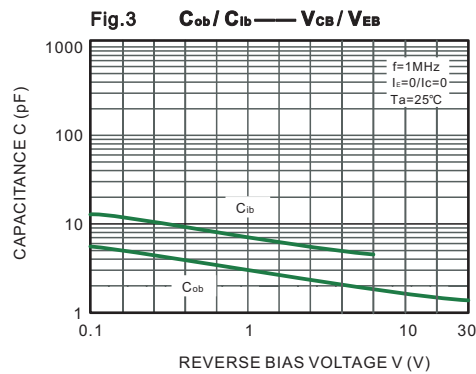
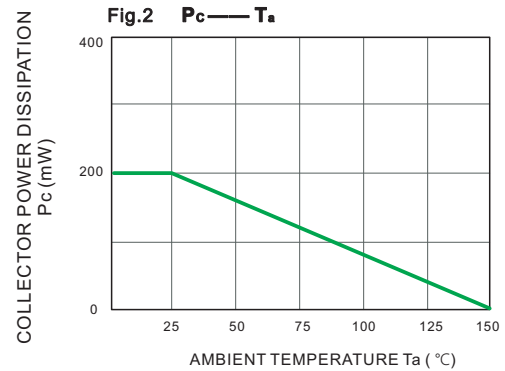
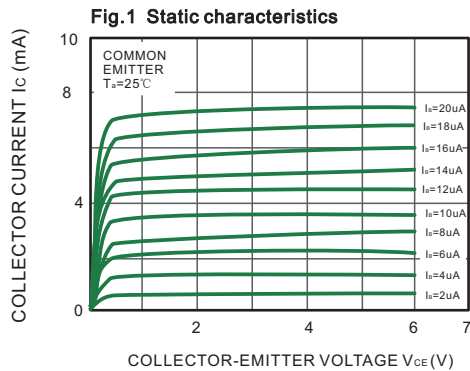
Parameter	Symbol	Value	Unit
Collector-Base Voltage	BC846 BC847 BC848	80 50 30	V
Collector-Emitter Voltage	BC846 BC847 BC848	65 45 30	V
Emitter-Base Voltage	V _{EBO}	6	V
Collector Current — Continuous	I _C	0.1	A
Collector Power Dissipation	P _C	200	mW
Thermal Resistance From Junction To Ambient	R _{thJA}	625	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55~+150	°C

ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted.)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	BC846 BC847 BC848	V _{CB0} I _C = 10μA, I _E = 0	80 50 30			V
Collector-emitter breakdown voltage	BC846 BC847 BC848	V _{CEO} I _C = 10mA, I _B = 0	65 45 30			V
Emitter-base breakdown voltage	V _{EBO}	I _E = 10μA, I _C = 0	6			V
Collector cut-off current	BC846 BC847 BC848	I _{CB0} V _{CB} = 70V, I _E = 0 V _{CB} = 50V, I _E = 0 V _{CB} = 30V, I _E = 0			0.1	μA
Collector cut-off current	BC846 BC847 BC848	I _{CEO} V _{CE} = 60V, I _B = 0 V _{CE} = 45V, I _B = 0 V _{CE} = 30V, I _B = 0			0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} = 5V, I _C = 0			0.1	μA
DC current gain	BC846A, 847A, 848A BC846B, 847B, 848B BC847C, BC848C	h _{FE} V _{CE} = 5V, I _C = 2mA	110 200 420		220 450 800	
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 output capacitance	C _{ob}	V _{CB} = 10V, f = 1MHz			4.5	pF

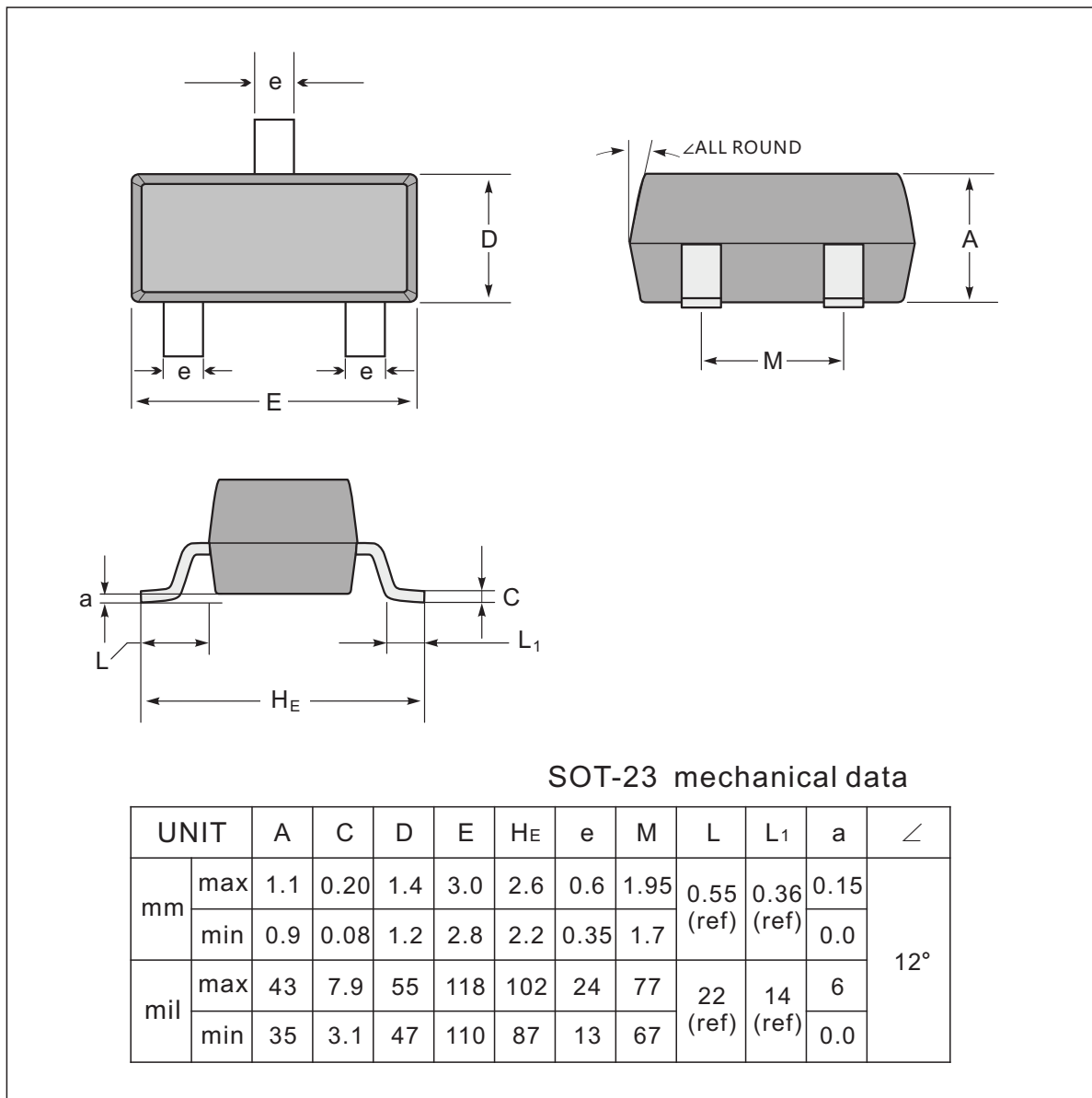


TYPICAL CHARACTERISTICS

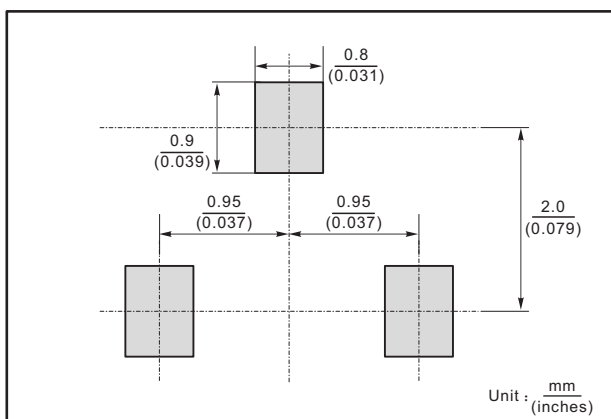




SOT-23 Package Outline Dimensions



The recommended mounting pad size



Marking

Type number	Marking code
BC846A	1A
BC846B	1B
BC847A	1E
BC847B	1F
BC847C	1G
BC848A	1J
BC848B	1K
BC848C	1L