

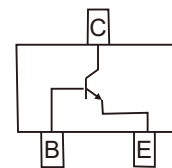
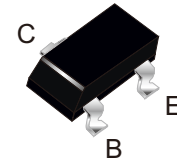
FEATURES

- Epoxy meets UL-94 V-0 flammability rating
- Complementary to BC856,BC857,BC858
- Power Dissipation of 200mW
- Ideally suited for automatic insertion
- For switching and AF amplifier applications

MECHANICAL DATA

- Case:SOT-23
- Terminals:Plated solderable per MIL-STD-750,method 2026
- Mounting Position: Any
- Marking:BC846A:1A, BC846B:1B
BC847A:1E, BC847B:1F, BC847C:1G
BC848A:1J, BC848B:1K, BC848C:1L

SOT-23



MAXIMUM RATINGS($T_A=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Value	
Collector-Emitter Voltage	V_{CE0}	V	BC846 BC847 BC848	65 45 30
Collector-Base Voltage	V_{CB0}	V	BC846 BC847 BC848	80 50 30
Emitter-Base Voltage	V_{EB0}	V	6.0	
Collector Current, Continuous	I_C	mA	100	
Power Dissipation	P_D	mW	200	
Operation Junction Temperature	T_J	$^{\circ}\text{C}$	-55 to +150	
Storage Temperature	T_{STG}	$^{\circ}\text{C}$	-55 to +150	
Thermal resistance From junction to ambient	$R_{\theta JA}$	$^{\circ}\text{C}/\text{W}$	625	

BC846, BC847, BC848

ELECTRICAL CHARACTERISTICS(T_A=25°C Unless otherwise specified)

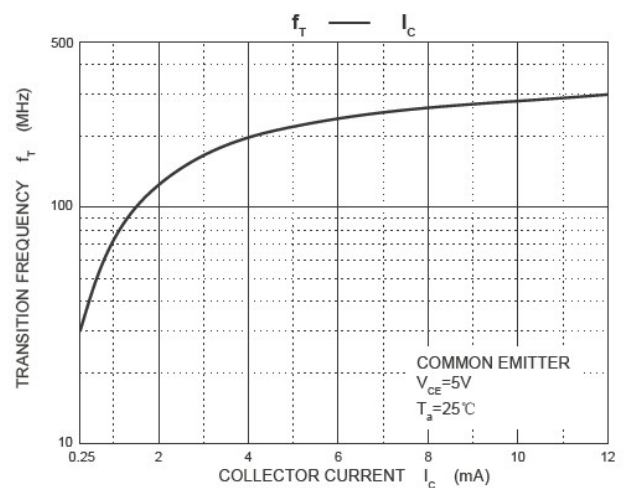
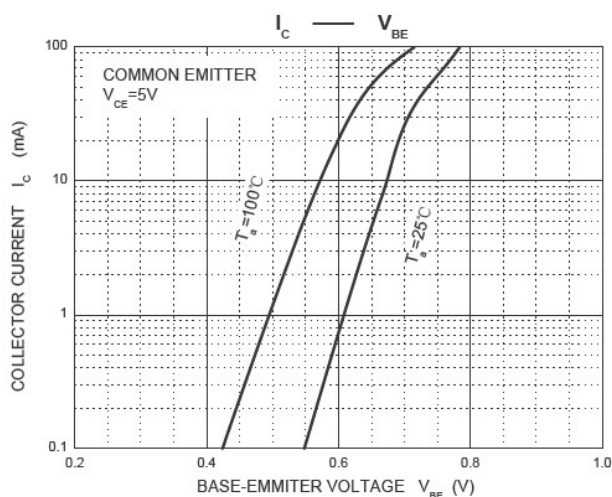
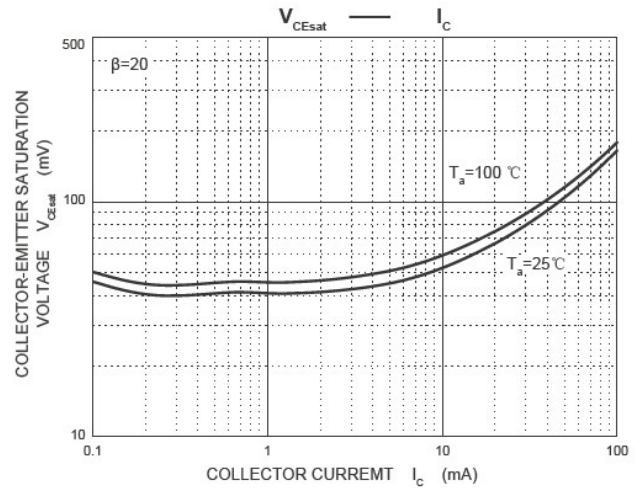
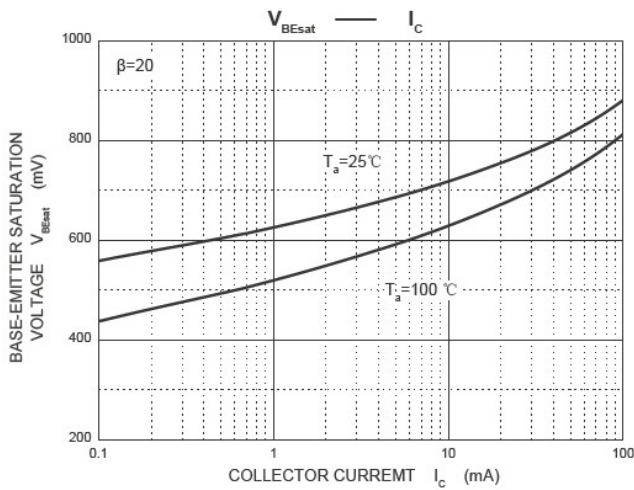
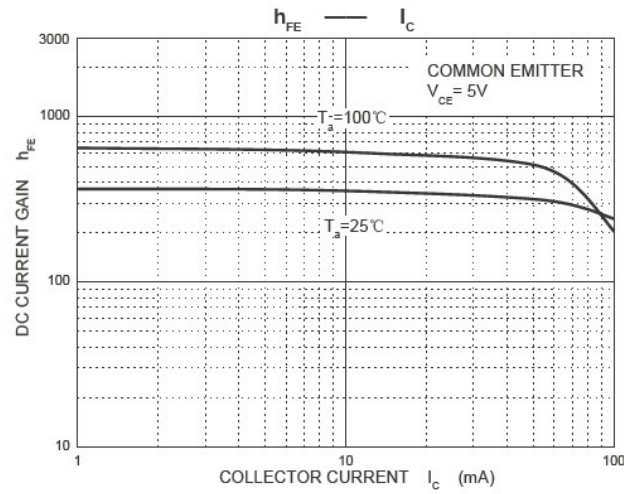
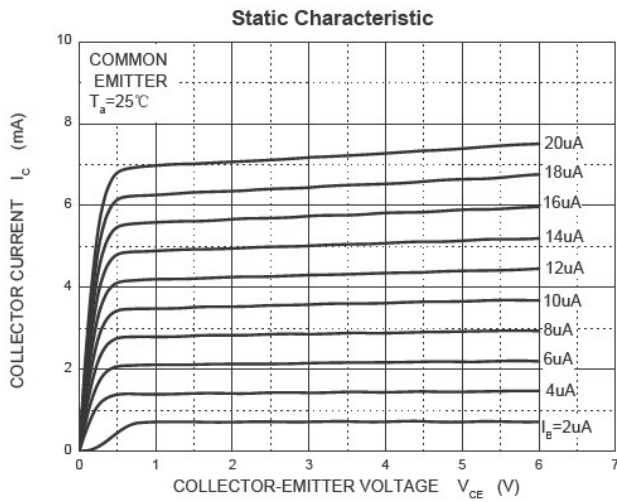
Item	Symbol	Unit	Conditions	Min	Max
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	V	I _C =10mA, I _B =0	BC846 65 BC847 45 BC848 30	---
Collector-Base Breakdown Voltage	V _{(BR)CBO}	V	I _C =10μA, I _E =0	BC846 80 BC847 50 BC848 30	---
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	V	I _E =10μA, I _C =0	6.0	---
Collector cut-off Current	I _{CBO}	nA	V _{CB} =70V, I _E =0 V _{CB} =50V, I _E =0 V _{CB} =30V, I _E =0	BC846 --- BC847 --- BC848 ---	100
Collector cut-off Current	I _{CEO}	nA	V _{CE} =60V, I _B =0 V _{CE} =45V, I _B =0 V _{CE} =30V, I _B =0	BC846 --- BC847 --- BC848 ---	100
Emitter cut-off Current	I _{EBO}	nA	V _{EB} =5V, I _C =0	---	100
DC Current Gain	h _{FE}		I _C =2mA, V _{CE} =5V	BC846A,BC847A,BC848A 110 BC846B,BC847B,BC848B 200 BC847C,BC848C 420	220 450 800
Collector-Emitter Saturation Voltage	V _{CE(set)}	V	I _C =100mA, I _B =5mA	---	0.5
Base-Emitter Saturation Voltage	V _{BE(set)}	V	I _C =100mA, I _B =5mA	---	1.1
Output Capacitance	C _{ob}	pF	V _{CB} =10V, f=1.0MHz, I _E =0	---	4.5
Transition frequency	f _t	MHz	I _C =10mA, V _{CE} =5V f=100MHz	100	---

AVAILABLE PACK INFORMATION

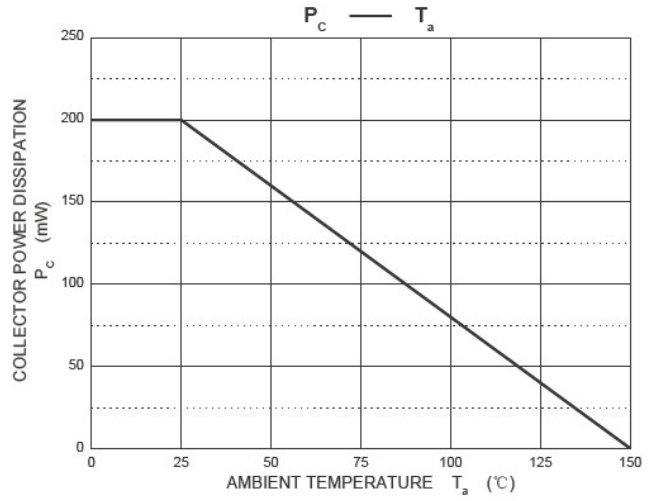
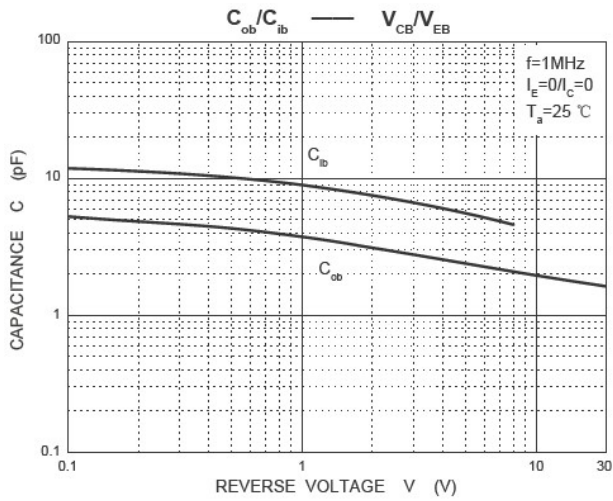
Product code	Pack	Reel Size (mm)	Quantity (Pcs/reel)	Quantity (pcs/box)	Quantity (pcs/carton)
BC846/BC847/BC848	T/R	Φ180	3K	30K	120K

BC846, BC847, BC848

Characteristics(Typical)

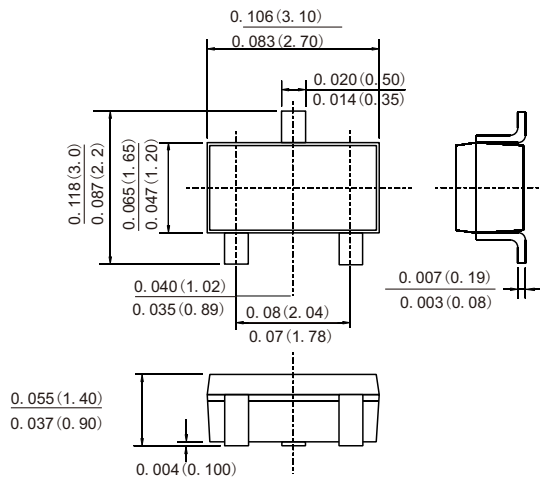


BC846, BC847, BC848



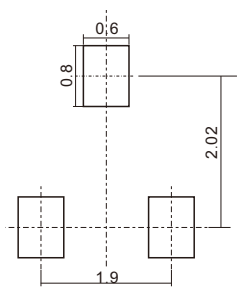
Outline Dimensions

SOT-23



Dimensions in inches and (millimeters)

Suggested pad layout



Dimensions in millimeters

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