

FEATURES

For general AF applications

High collector current

High current gain

Low collector-emitter saturation voltage

BC846A/B (NPN)

BC847A/B/C (NPN)

BC848A/B/C (NPN)

Marking

BC846A	BC846B	BC847A	BC847B
1A	1B	1E	1F

BC847C	BC848A	BC848B	BC848C
1G	1J	1K	1L

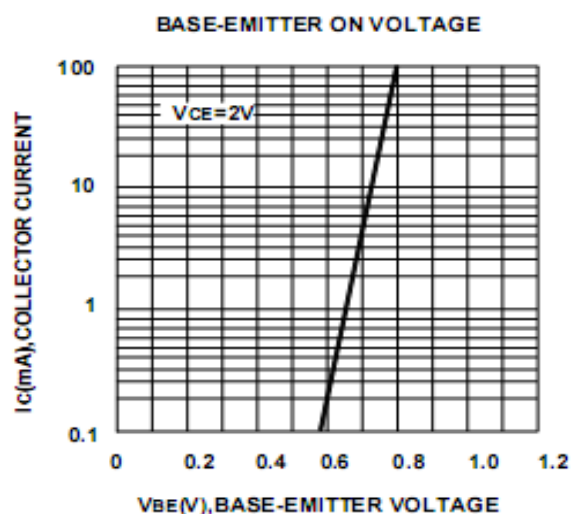
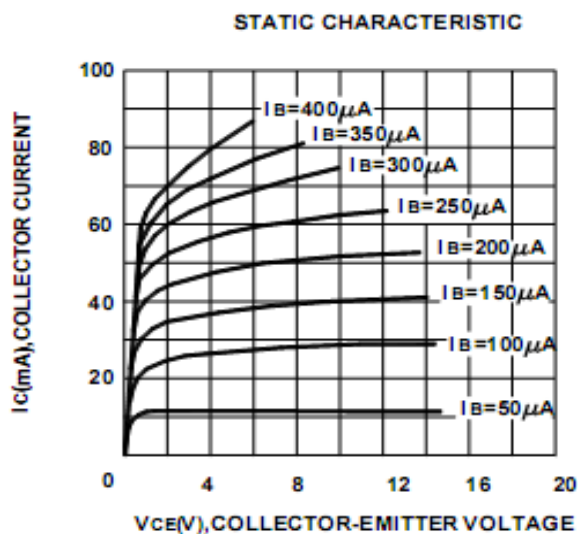

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

Parameter		Symbol	Value	Unit
Collector-Base Voltage	BC846	V_{CBO}	80	V
	BC847	V_{CBO}	50	
	BC848	V_{CBO}	30	
Collector-Emitter Voltage	BC846	V_{CEO}	65	V
	BC847	V_{CEO}	45	
	BC848	V_{CEO}	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 to +150	°C

ELECTRICAL CHARACTERISTICS (T_{amb}=25 °C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	BC846	I _C = 10μA, I _E =0	80			V
	BC847		50			
	BC848		30			
Collector-emitter breakdown voltage	BC846	I _C = 10mA, I _B =0	65			V
	BC847		45			
	BC848		30			
Emitter-base breakdown voltage	VEBO	I _E = 10μA, I _C =0	6			V
Collector cut-off current	BC846	V _{CB} =70 V, I _E =0				μA
	BC847		V _{CB} =50 V, I _E =0			
	BC848		V _{CB} =30 V, I _E =0		0.1	
Collector cut-off current	BC846	V _{CE} =60 V, I _B =0				μA
	BC847		V _{CE} =45 V, I _B =0			
	BC848		V _{CE} =30 V, I _B =0		0.1	
Emitter cut-off current	I _{EBO}	V _{EB} =5 V, I _C =0			0.1	μA
DC current gain	BC846A,847A,848A	V _{CE} = 5V, I _C = 2mA	110		220	
	BC846B,847B,848B		200		450	
	BC847C,BC848C		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} = 5 V, I _C = 10mA f=100MHz	100			MHz
Collector output capacitance	C _{ob}	V _{CB} =10V,f=1MHz			4.5	pF

BC846A/B
BC847A/B/C Typical Characteristics
BC848A/B/C



BC846A/B

BC847A/B/C Typical Characteristics

BC848A/B/C

