

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

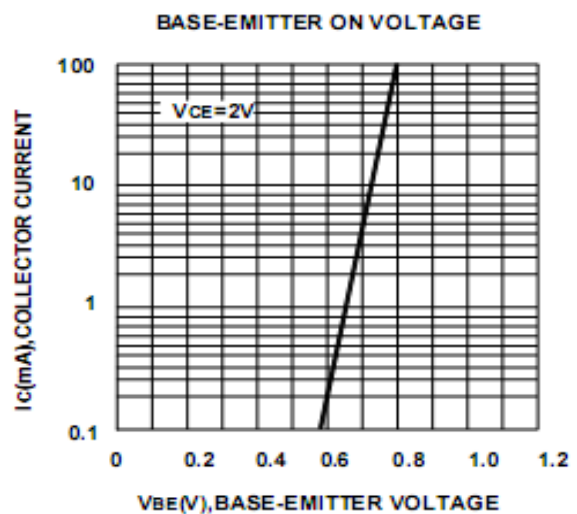
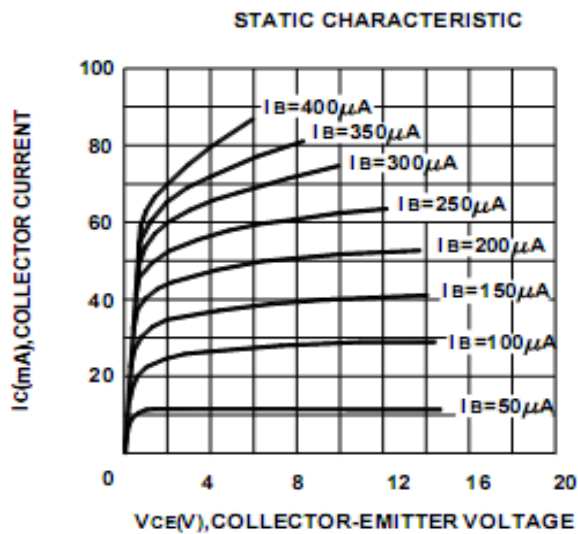

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

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 (Tamb=25 °C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	BC846 BC847 BC848	VCBO IC= 10μA, IE=0	80			V
			50			
			30			
Collector-emitter breakdown voltage	BC846 BC847 BC848	VCEO IC= 10mA, IB=0	65			V
			45			
			30			
Emitter-base breakdown voltage		VEBO IE= 10μA, IC=0	6			V
Collector cut-off current	BC846 BC847 BC848	ICBO VCB=70 V, IE=0 VCB=50 V, IE=0 VCB=30 V, IE=0			0.1	μA
Collector cut-off current	BC846 BC847 BC848	ICEO VCE=60 V, IB=0 VCE=45 V, IB=0 VCE=30 V, IB=0			0.1	μA
Emitter cut-off current		IEBO VEB=5 V, IC=0			0.1	μA
DC current gain	BC846A,847A,848A BC846B,847B,848B BC847C,BC848C	hFE VCE= 5V, IC= 2mA	110		220	
			200		450	
			420		800	
Collector-emitter saturation voltage		VCE(sat) IC=100mA, IB= 5mA			0.5	V
Base-emitter saturation voltage		VBE(sat) IC=100mA, IB= 5mA			1.1	V
Transition frequency		fT VCE= 5 V, IC= 10mA f=100MHz	100			MHz
Collector output capacitance		Cob VCB=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

