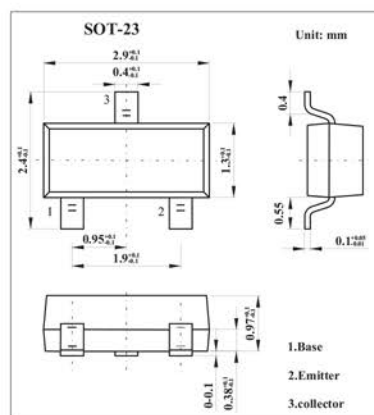


### BC846A,B/BC847A,B,C/BC848A,B,C



#### ■ Features

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

#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	BC846	80	V
	BC847	50	
	BC848	30	
Collector-Emitter Voltage	BC846	65	V
	BC847	45	
	BC848	30	
Emitter-Base Voltage	$V_{EBO}$	6	V
Collector Current -Continuous	$I_C$	0.1	A
Collector Power Dissipation	$P_C$	200	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-65 to +150	$^\circ\text{C}$

## BC846A,B/BC847A,B,C/BC848A,B,C

### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	BC846	Ic = 10 μA , Ie = 0	80			V
	BC847		50			
	BC848		30			
Collector-emitter breakdown voltage	BC846	Ic = 10mA , Ib = 0	65			V
	BC847		45			
	BC848		30			
Emitter-base Breakdown voltage	VEBO	Ie = 10 μA , Ic = 0	6			V
Collector-base cutoff current	BC846	Vcb = 70 V , Ie = 0			0.1	μ A
	BC847	Vcb = 50 V , Ie = 0				
	BC848	Vcb = 30 V , Ie = 0				
Collector-emitter cutoff current	BC846	Vce = 70V , Ib = 0			0.1	μ A
	BC847	Vce = 50V , Ib = 0				
	BC848	Vce = 30V , Ib = 0				
Emitter-base cutoff current	IEBO	VEB = 5 V , Ic = 0			0.1	μ A
DC current gain	BC846A,847A,848A BC846B,847B,848B BC847C,848C	hFE VCE = 5 V , Ic = 2 mA	110		220	
			200		450	
			420		800	
Collector-emitter saturation voltage	VCE(sat)	Ic = 100 mA , Ib = 5mA			0.5	V
Base-emitter saturation voltage	VBE(sat)	Ic = 100 mA , Ib = 5mA			1.1	V
Collector output capacitance	Cob	Vcb=10V,f=1MHz			4.5	pF
Transition frequency	ft	VCE = 5 V , Ic = 10 mA , f = 100 MHz	100			MHz

### ■ Marking

NO.	BC846A	BC846B
Marking	1A	1B

NO.	BC847A	BC847B	BC847C
Marking	1E	1F	1G

NO.	BC848A	BC848B	BC848C
Marking	1J	1K	1L

## BC846A,B/BC847A,B,C/BC848A,B,C

### ■ Typical Characteristics

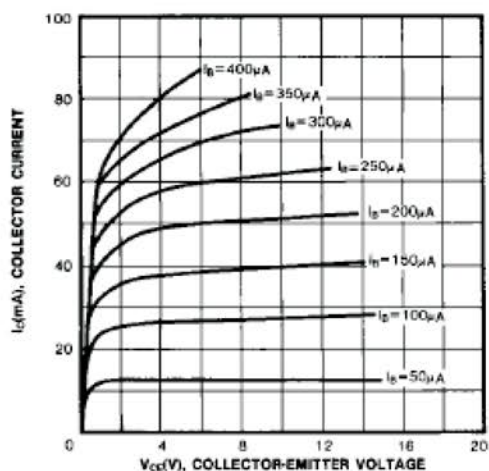


Fig.1 Static Characteristic

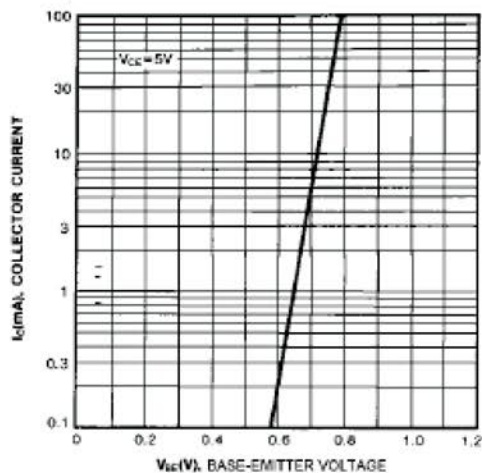


Fig.2 Transfer Characteristic

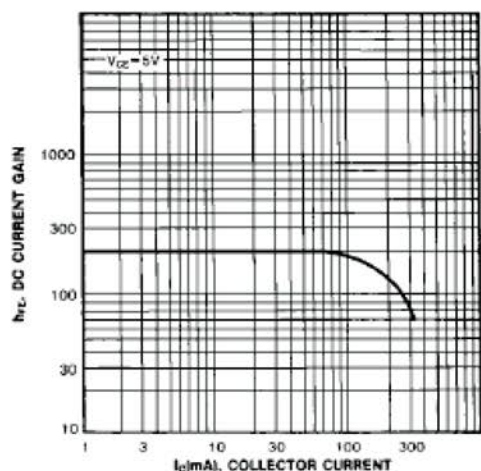


Fig.3 DC Current Gain

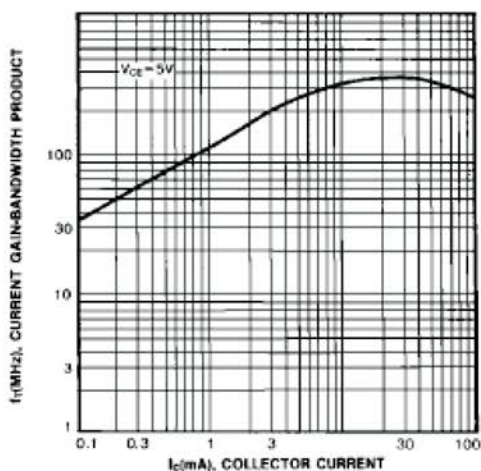


Fig.4 Current Gain Bandwidth Product

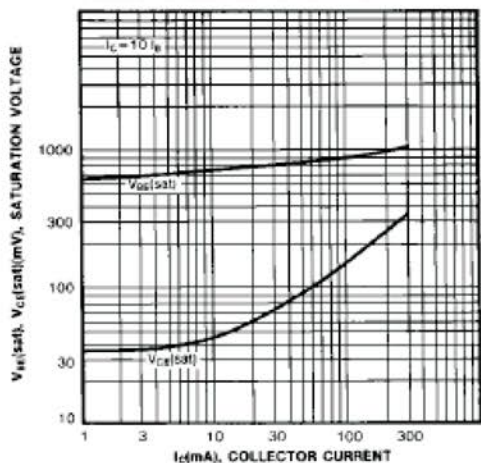


Fig.5 Base Emitter Saturation Voltage

Collector Emitter Saturation Voltage

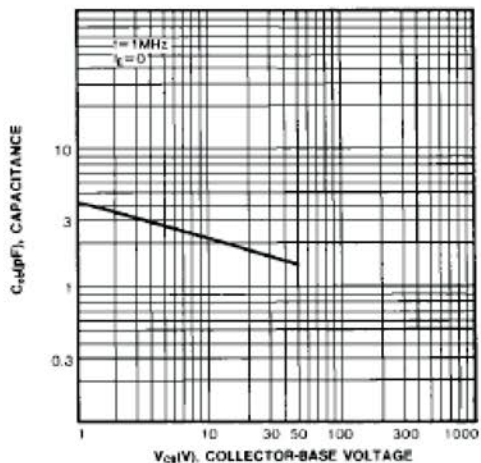


Fig.6 Output Capacitance