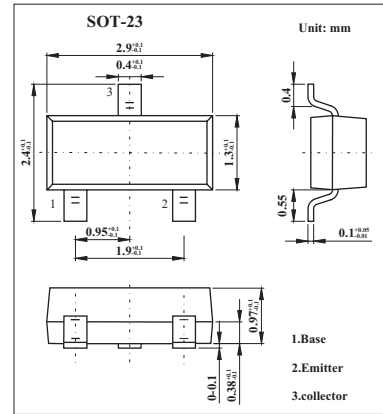


KC846A,B/KC847A,B,C/KC848A,B,C

(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	V _{CB0}	80	V
		50	
		30	
Collector-Emitter Voltage	V _{CE0}	65	V
		45	
		30	
Emitter-Base Voltage	V _{EB0}	6	V
Collector Current -Continuous	I _C	0.1	A
Collector Power Dissipation	P _C	200	mW
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-65 to +150	°C

KC846A,B/KC847A,B,C/KC848A,B,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	KC846	Ic = 10 μA , IE = 0	80			V	
	KC847		50				
	KC848		30				
Collector-emitter breakdown voltage	KC846	Ic = 10mA , IB = 0	65			V	
	KC847		45				
	KC848		30				
Emitter-base Breakdown voltage	VEBO	IE = 10 μA , Ic = 0	6			V	
Collector-base cutoff current	KC846	ICBO	V _{CB} = 70 V , IE = 0			0.1	μ A
	KC847		V _{CB} = 50 V , IE = 0				
	KC848		V _{CB} = 30 V , IE = 0				
Collector-emitter cutoff current	KC846	ICEO	V _{CE} = 70V , IB = 0			0.1	μ A
	KC847		V _{CE} = 50V , IB = 0				
	KC848		V _{CE} = 30V , IB = 0				
Emitter-base cutoff current	IEBO	VEB = 5 V , Ic = 0			0.1	μ A	
DC current gain	KC846A,847A,848A	hFE	V _{CE} = 5 V , Ic = 2 mA	110		220	
	KC846B,847B,848B			200		450	
	KC847C,848C			420		800	
Collector-emitter saturation voltage	V _{CE(sat)}	Ic = 100 mA , IB = 5mA			0.5	V	
Base-emitter saturation voltage	V _{BE(sat)}	Ic = 100 mA , IB = 5mA			1.1	V	
Collector output capacitance	Cob	V _{CB} =10V,f=1MHz			4.5	pF	
Transition frequency	f _T	V _{CE} = 5 V , Ic = 10 mA , f = 100 MHz	100			MHz	

■ Marking

NO.	KC846A	KC846B
Marking	1A	1B

NO.	KC847A	KC847B	KC847C
Marking	1E	1F	1G

NO.	KC848A	KC848B	KC848C
Marking	1J	1K	1L

KC846A,B/KC847A,B,C/KC848A,B,C

(BC846A,B/BC847A,B,C/BC848A,B,C)

■ Typical Characteristics

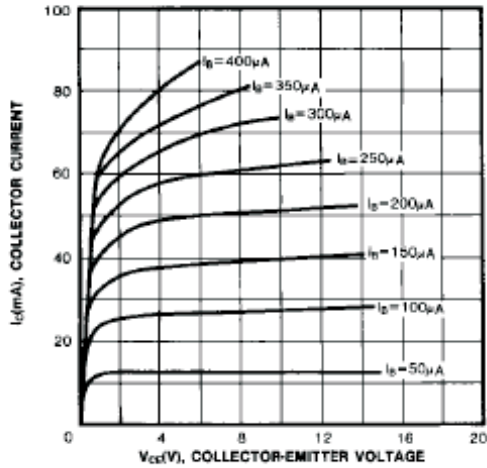


Fig.1 Static Characteristic

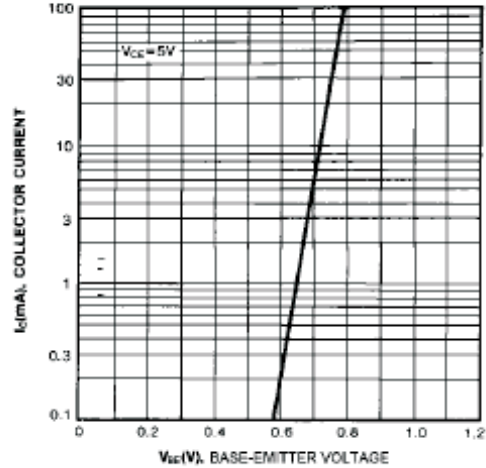


Fig.2 Transfer Characteristic

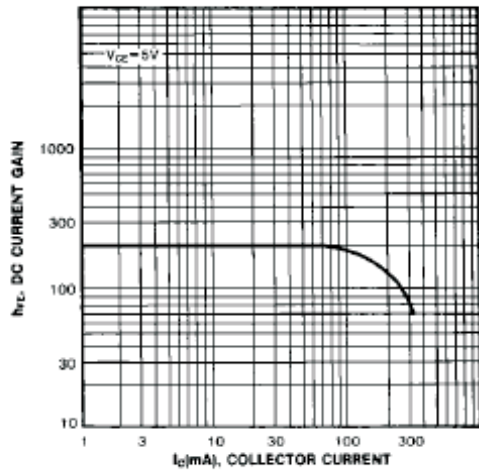


Fig.3 DC Current Gain

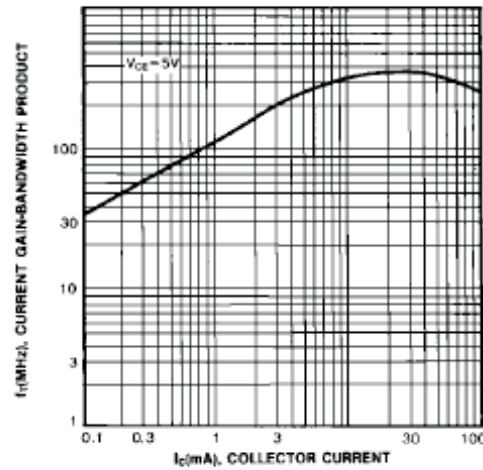


Fig.4 Current Gain Bandwidth Product

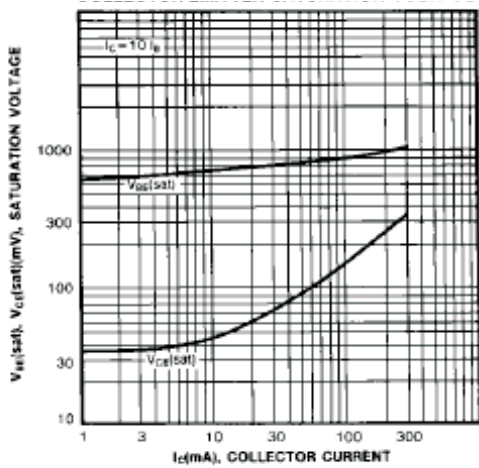


Fig.5 Base Emitter Saturation Voltage
Collector Emitter Saturation Voltage

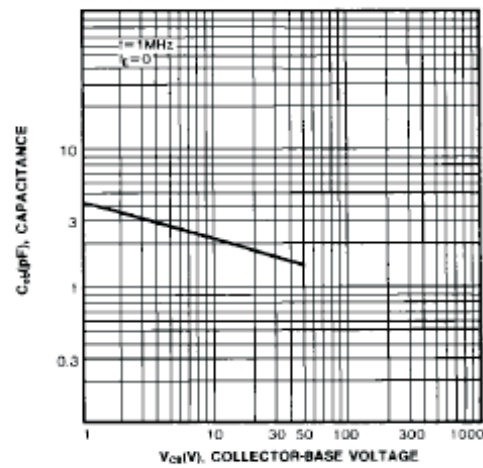


Fig.6 Output Capacitance