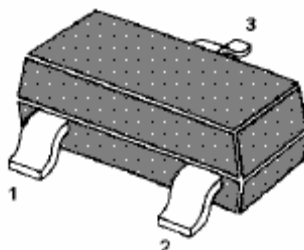


Kingtronics®**BC846~BC850**NPN Silicon Epitaxial
Transistors**For switching and amplifier applications**

As complementary types the PNP transistors

BC856~BC860 is recommended.

1.Base 2.Emitter 3.Collector
SOT-23 Plastic Package**Absolute Maximum Ratings (Ta = 25°C)**

PARAMETER	SYMBOL	VALUE	UNIT
Collector Base Voltage	BC846	80	V
	BC847, BC850	50	
	BC848, BC849	30	
Collector Emitter Voltage	BC846	65	V
	BC847, BC850	45	
	BC848, BC849	30	
Emitter Base Voltage	BC846, BC847	6	V
	BC848, BC849, BC850	5	
Collector Current	I _c	100	mA
Peak Collector Current	I _{CM}	200	mA
Power Dissipation	P _{tot}	200	mW
Junction Temperature	T _J	150	°C
Storage Temperature Range	T _S	- 65 to + 150	°C

Characteristics at Tamb = 25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT
DC Current Gain at V _{CE} = 5 V, I _C = 2 mA	A	110	-	220	-
	B	200	-	450	
	C	420	-	800	
Collector Emitter Saturation Voltage at I _C = 10 mA, I _B = 0.5 mA at I _C = 100 mA, I _B = 5 mA	V _{CEsat}	-	-	250	mV
		-	-	600	
Base Emitter On Voltage at I _C = 2 mA, V _{CE} = 5 V at I _C = 10 mA, V _{CE} = 5 V	V _{BE(on)}	580	-	700	mV
		-	-	720	
Collector Cutoff Current at V _{CB} = 30 V	I _{CBO}	-	-	15	nA
Current Gain Bandwidth Product at V _{CE} = 5 V, I _C = 10 mA, f = 100 MHz	f _T	-	300	-	MHz
Output Capacitance at V _{CB} = 10 V, f = 1 MHz	C _{ob}	-	-	6	pF
Input Capacitance at V _{EB} = 0.5 V, f = 1 MHz	C _{ib}	-	9	-	pF
Noise Figure at I _C = 200 μA, V _{CE} = 5 V, R _G = 2 KΩ, f = 1 KHz	NF	BC846, BC847, BC848	-	10	dB
		BC849, BC850	-	4	
at I _C = 200 μA, V _{CE} = 5 V, R _G = 2 KΩ, f = 30~15 KHz	BC849	-	-	4	dB
		BC850	-	-	

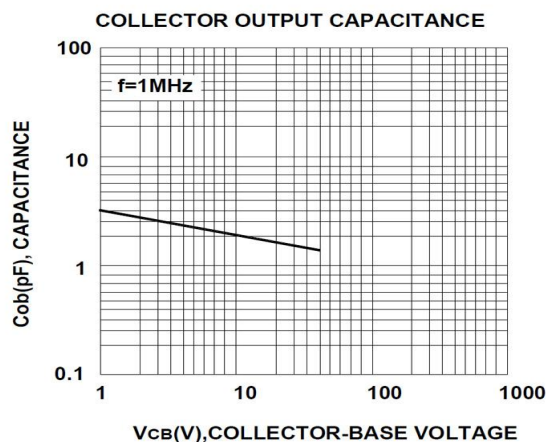
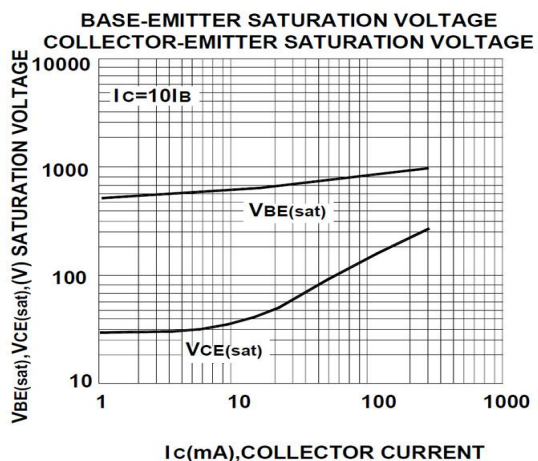
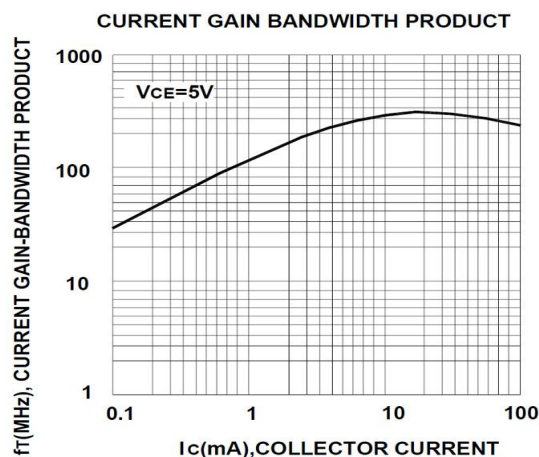
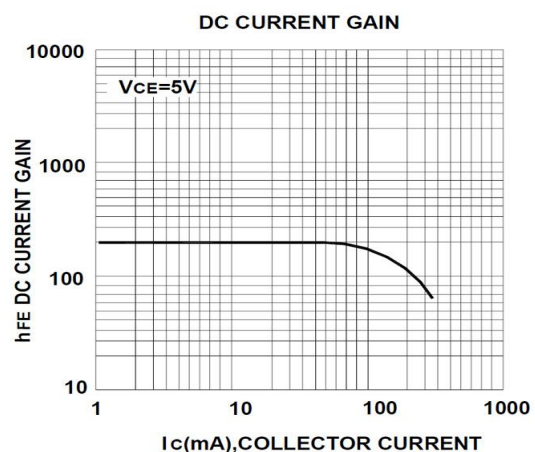
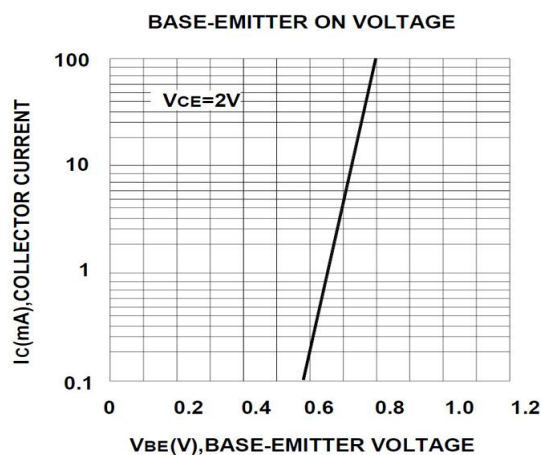
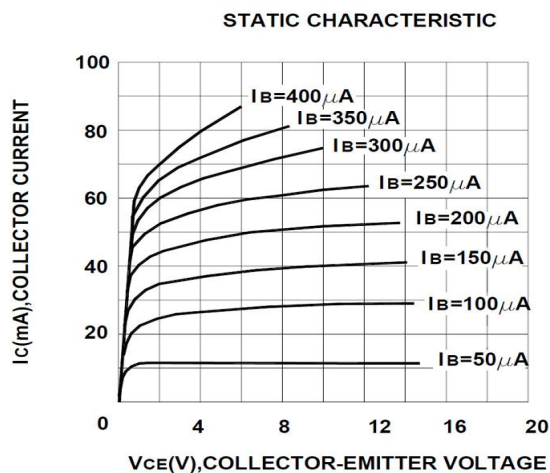
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BC846~BC850

NPN Silicon Epitaxial Transistors

RATINGS AND CHARACTERISTIC CURVES BC846 THUR BC850



Note: Specifications are subject to change without notice.

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