

BC846/7/8

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

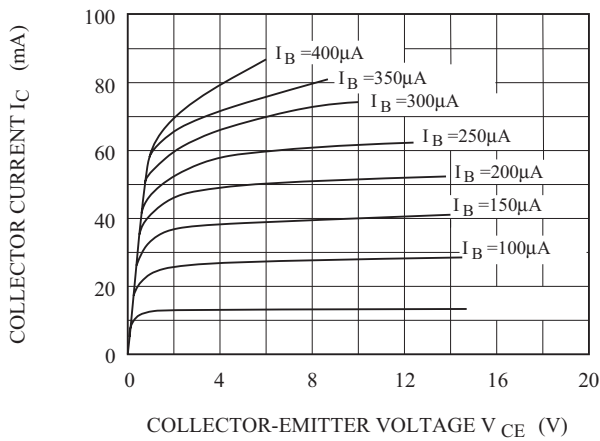
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB}=30V, I_E=0$	-	-	15	nA
DC Current Gain (Note)	BC846	h_{FE}	$V_{CE}=5V, I_C=2mA$	110	-	450	
	BC847			110	-	800	
	BC848			110	-	800	
Collector-Emitter Saturation Voltage		$V_{CE(sat)} 1$	$I_C=10mA, I_B=0.5mA$	-	0.09	0.25	V
		$V_{CE(sat)} 2$	$I_C=100mA, I_B=5mA$	-	0.2	0.6	
Base-Emitter Saturation Voltage		$V_{BE(sat)} 1$	$I_C=10mA, I_B=0.5mA$	-	0.7	-	V
		$V_{BE(sat)} 2$	$I_C=100mA, I_B=5mA$	-	0.9	-	
Base-Emitter Voltage		$V_{BE(ON1)}$	$V_{CE}=5V, I_C=2mA$	0.58	-	0.7	V
		$V_{BE(ON2)}$	$V_{CE}=5V, I_C=10mA$	-	-	0.75	V
Transition Frequency		f_T	$V_{CE}=5V, I_C=10mA, f=100MHz$	-	300	-	MHz
Collector Output Capacitance		C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	2.5	4.5	pF
Noise Figure		NF	$V_{CE}=6V, I_C=0.1mA$ $R_g=10k\Omega, f=1kHz$	-	1.0	10	dB

NOTE : According to the value of h_{FE} the BC846, BC847, BC848 are classified as follows.

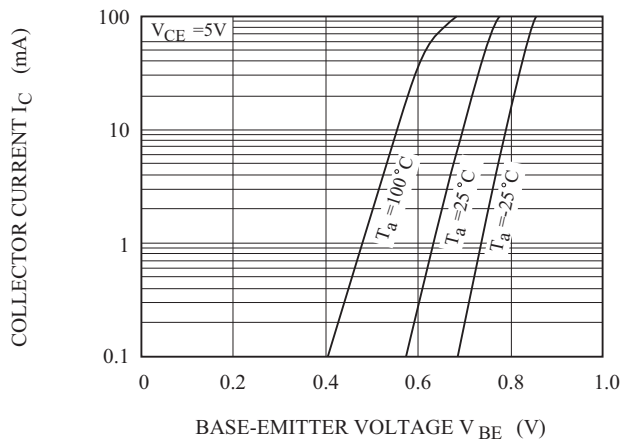
CLASSIFICATION		A	B	C
h_{FE}	BC846	110 220	200 450	-
	BC847	110 220	200 450	420 800
	BC848	110 220	200 450	420 800

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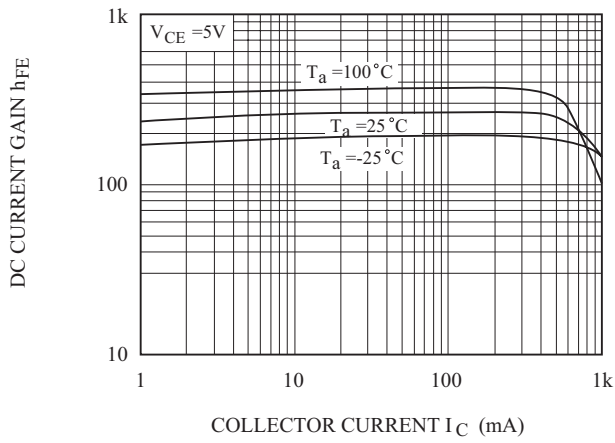
$I_C - V_{CE}$



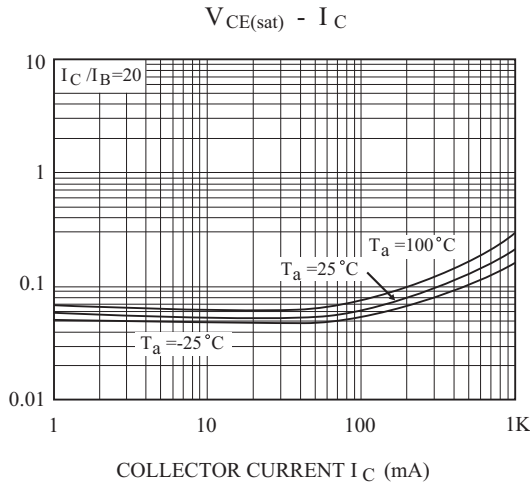
$I_C - V_{BE}$



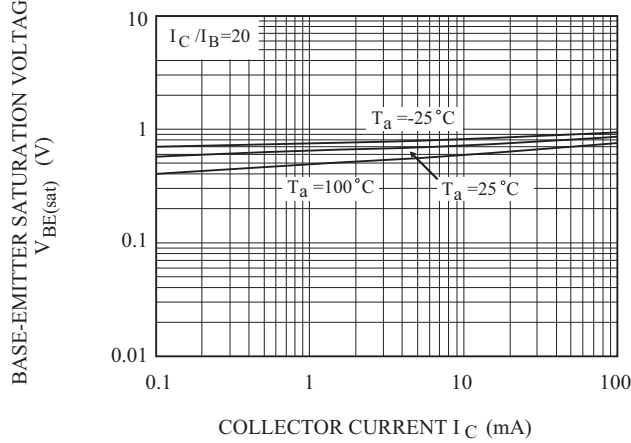
$h_{FE} - I_C$



Collector-Emitter Saturation Voltage $V_{CE(sat)}$ (V)



$V_{BE(sat)} - I_C$



Collector Output Capacitance C_{ob} (pF)

