

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min	Typ	Max	Units	Conditions
Collector-Base Breakdown Voltage BC846A-BC846B BC847A-BC847C BC848A-BC848C,BC849B-BC849C	$V_{(BR)CBO}$	80 50 30			V	$I_C=10\mu A, I_E=0$
Collector-Emitter Breakdown Voltage BC846A-BC846B BC847A-BC847C BC848A-BC848C,BC849B-BC849C	$V_{(BR)CEO}$	65 45 30			V	$I_C=10mA, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	6			V	$I_E=10\mu A, I_C=0$
Collector Cut-off Current BC846A-BC846B BC847A-BC847C BC848A-BC848C,BC849B-BC849C	I_{CBO}			0.1	μA	$V_{CB}=70V, I_E=0$ $V_{CB}=50V, I_E=0$ $V_{CB}=30V, I_E=0$
Collector Cut-off Current BC846A-BC846B BC847A-BC847C BC848A-BC848C,BC849B-BC849C	I_{CEO}			0.1	μA	$V_{CE}=60V, I_B=0$ $V_{CE}=45V, I_B=0$ $V_{CE}=30V, I_B=0$
Emitter Cut-off Current	I_{EBO}			0.1	μA	$V_{EB}=5V, I_C=0$
DC Current Gain BC846A,BC847A, BC848A BC846B,BC847B,BC848B, BC849B BC847C,BC848C,BC849C	h_{FE}	110 200 420		220 450 800		$V_{CE}=5V, I_C=2mA$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.5	V	$I_C=100mA, I_B=5mA$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			1.10	V	$I_C=100mA, I_B=5mA$
Transition Frequency	f_T	100			MHz	$V_{CE}=5V, I_C=10mA, f=100MHz$
Collector Output Capacitance	C_{ob}			4.5	pF	$V_{CB}=10V, f=1MHz$

Note:

1. Transistor mounted on an FR4 printed-circuit board

Curve Characteristics

Fig. 1 - Static Characteristics

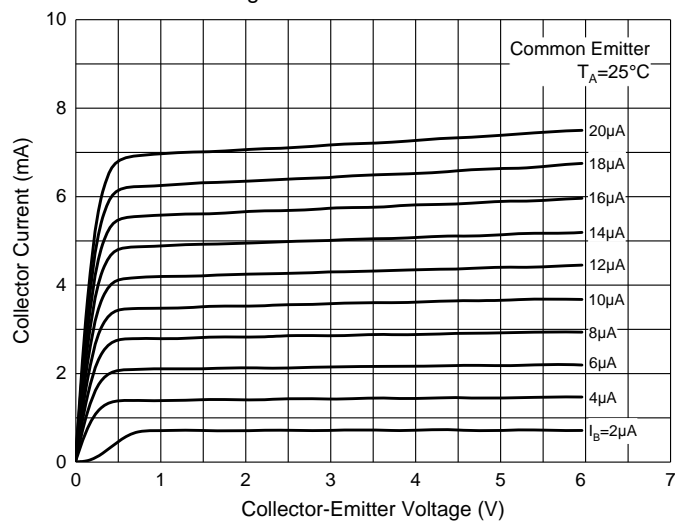


Fig. 2 - DC Current Gain Characteristics

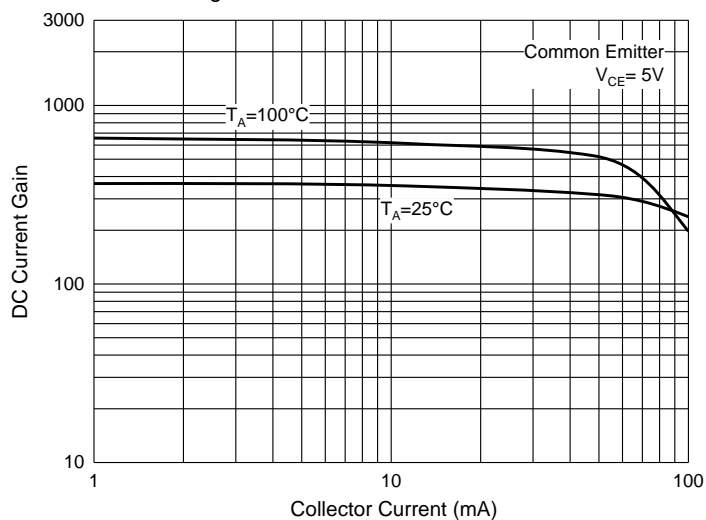


Fig. 3 - Base-Emitter Saturation Voltage Characteristics

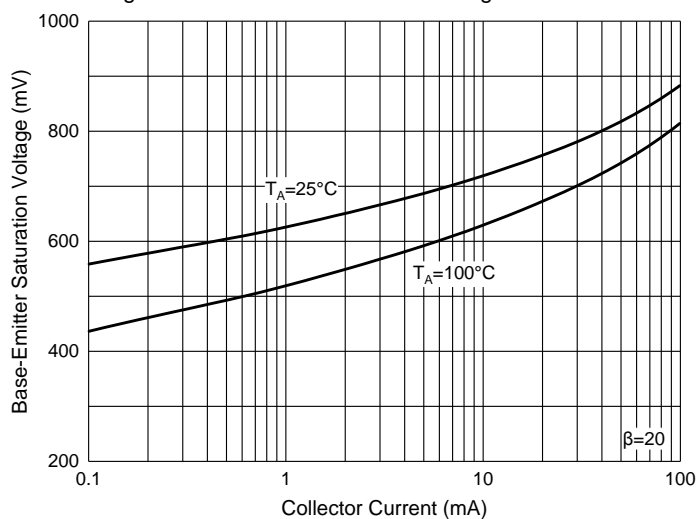


Fig. 4 - Collector-Emitter Saturation Voltage Characteristics

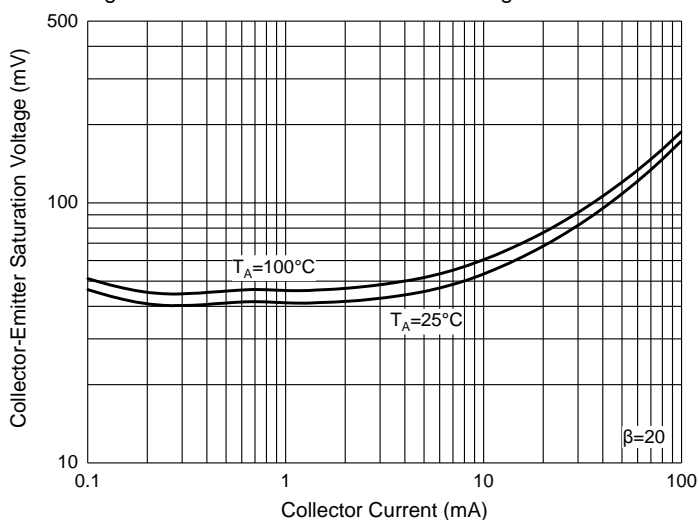


Fig. 5 - Base-Emitter Voltage Characteristics

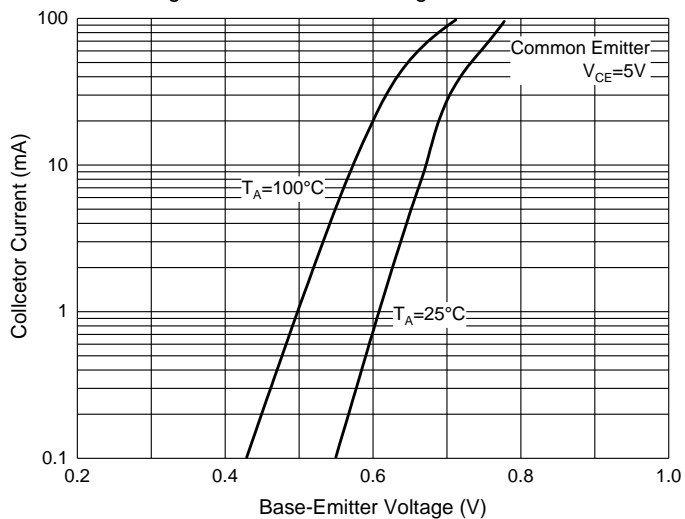
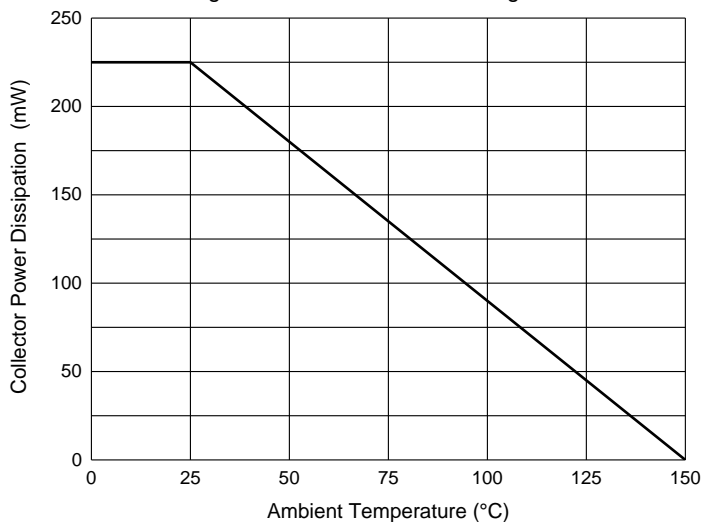


Fig. 6 - Collector Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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