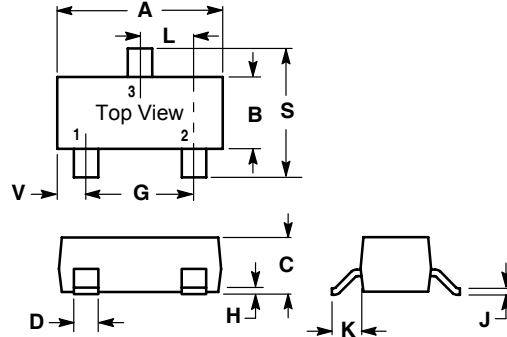
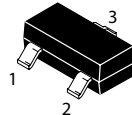
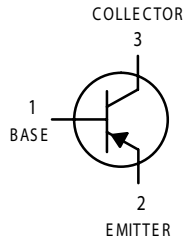


A suffix of "-C" specifies halogen & lead-free

FEATURES

- General Purpose Transistor PNP Type
- Collect current : - 0.1A
- Operating Temp. : -55°C ~ +150°C
- RoHS compliant product



SOT-23		
Dim	Min	Max
A	2.800	3.040
B	1.200	1.400
C	0.890	1.110
D	0.370	0.500
G	1.780	2.040
H	0.013	0.100
J	0.085	0.177
K	0.450	0.600
L	0.890	1.020
S	2.100	2.500
V	0.450	0.600
All Dimension in mm		

ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	BC856 BC857 BC858	V_{CBO} $I_C = -10 \mu A, I_E = 0$	-80		V
			-50		
			-30		
Collector-emitter breakdown voltage	BC856 BC857 BC858	V_{CEO} $I_C = -10 mA, I_B = 0$	-65		V
			-45		
			-30		
Emitter-base breakdown voltage	V_{EBO}	$I_E = -10 \mu A, I_C = 0$	-5		V
Collector cut-off current	BC856 BC857 BC858	I_{CBO} $V_{CB} = -70 V, I_E = 0$ $V_{CB} = -45 V, I_E = 0$ $V_{CB} = -25 V, I_E = 0$		-0.1	μA
Collector cut-off current	BC856 BC857 BC858	I_{CEO} $V_{CE} = -60 V, I_B = 0$ $V_{CE} = -40 V, I_B = 0$ $V_{CE} = -25 V, I_B = 0$		-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5 V, I_C = 0$		-0.1	μA
DC current gain	BC856A,857A,858A BC856B,857B,858B BC857C,BC858C	$H_{FE(1)}$ $V_{CE} = -5V, I_C = -2mA$	125	250	
			220	475	
			420	800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100mA, I_B = -5 mA$		-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -100 mA, I_B = -5mA$		-1.1	V
Transition frequency	f_T	$V_{CE} = -5 V, I_C = -10mA$ $f = 100MHz$	100		MHz

DEVICE MARKING

BC856A=3A; BC856B=3B; BC857A=3E; BC857B=3F; BC857C=3G; BC858A=3J; BC858B=3K; BC858C=3L

Typical Characteristics

BC857, BC858

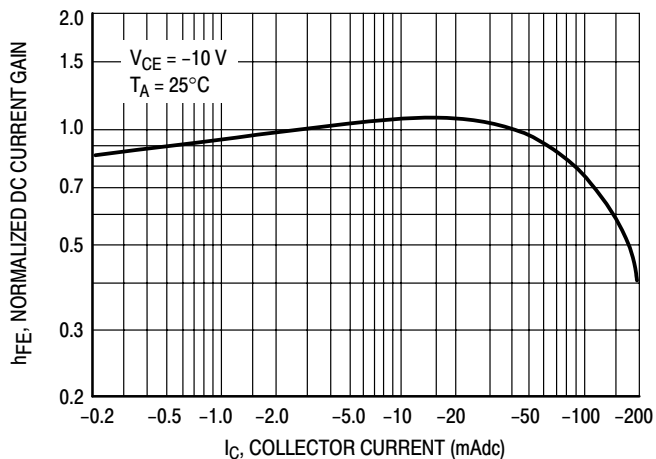


Figure 1. Normalized DC Current Gain

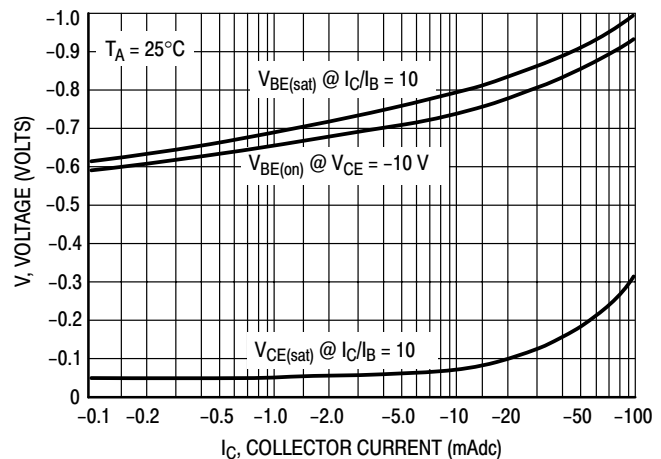


Figure 2. "Saturation" and "On" Voltages

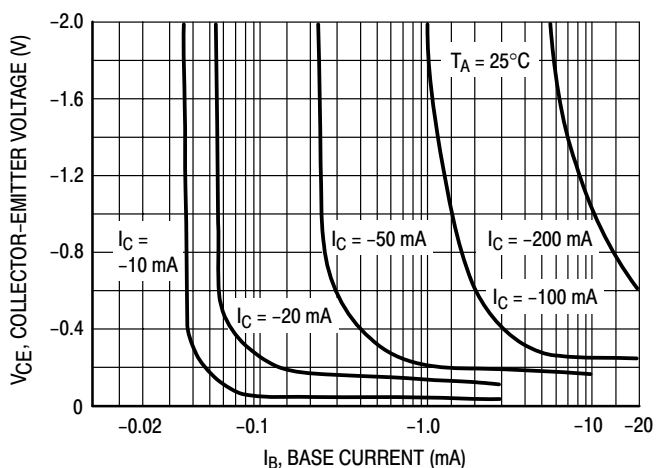


Figure 3. Collector Saturation Region

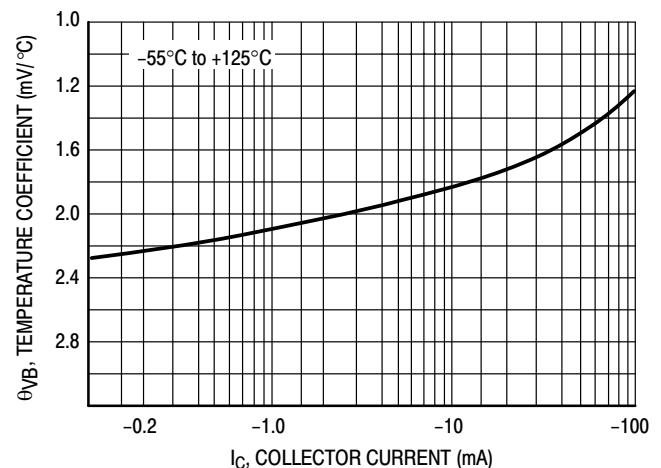


Figure 4. Base-Emitter Temperature Coefficient

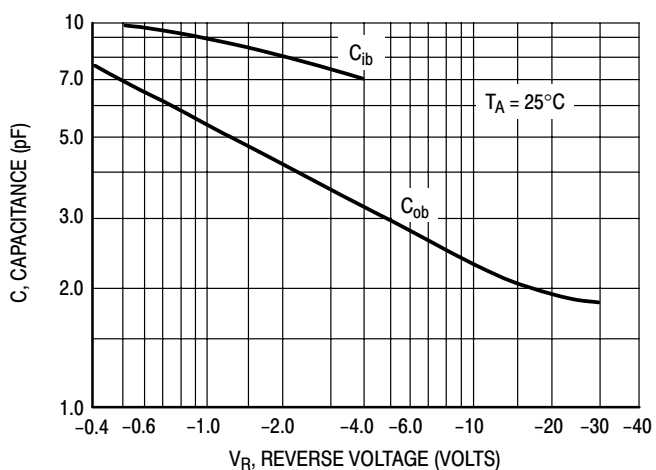


Figure 5. Capacitances

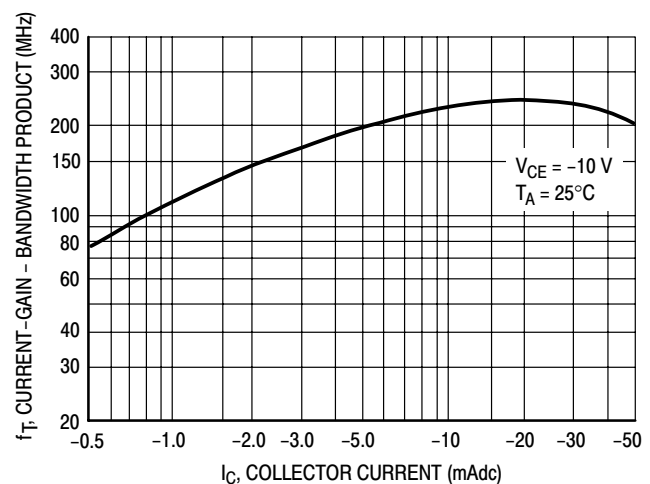


Figure 6. Current-Gain - Bandwidth Product

BC856

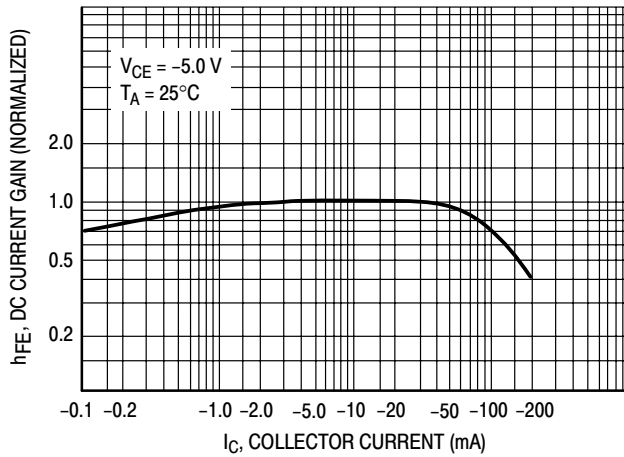


Figure 7. DC Current Gain

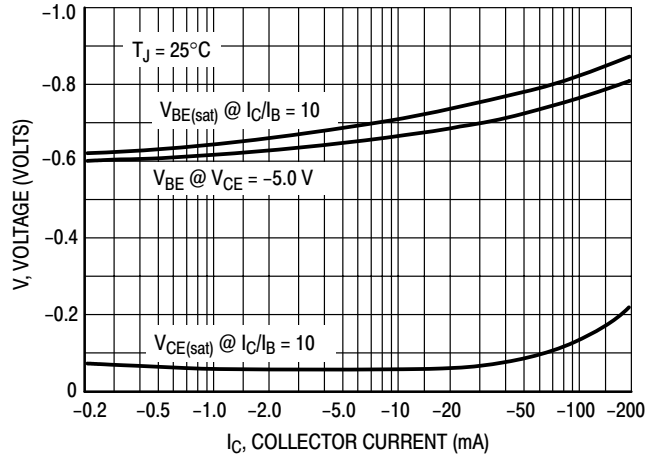


Figure 8. "On" Voltage

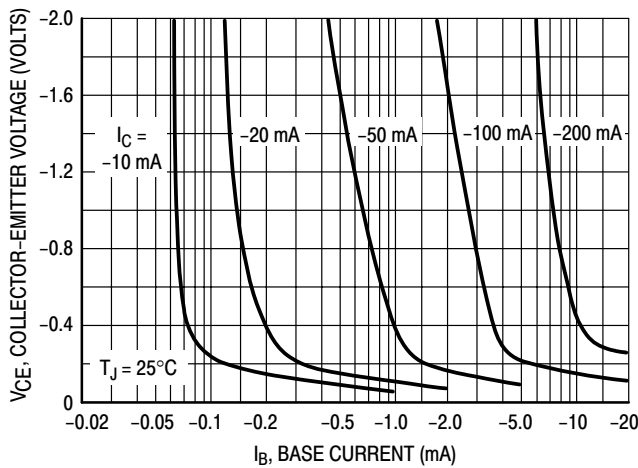


Figure 9. Collector Saturation Region

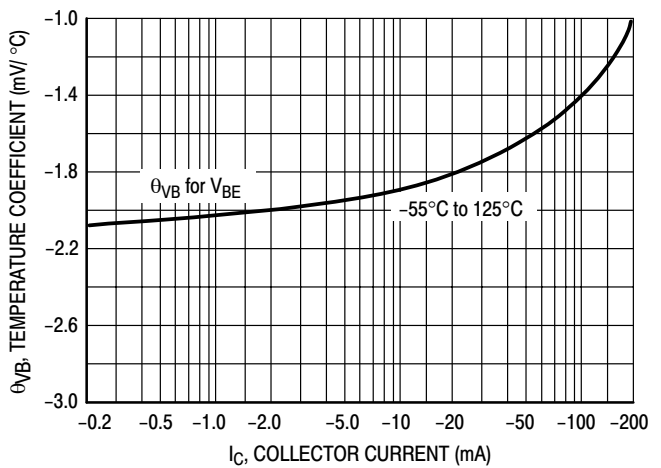


Figure 10. Base-Emitter Temperature Coefficient

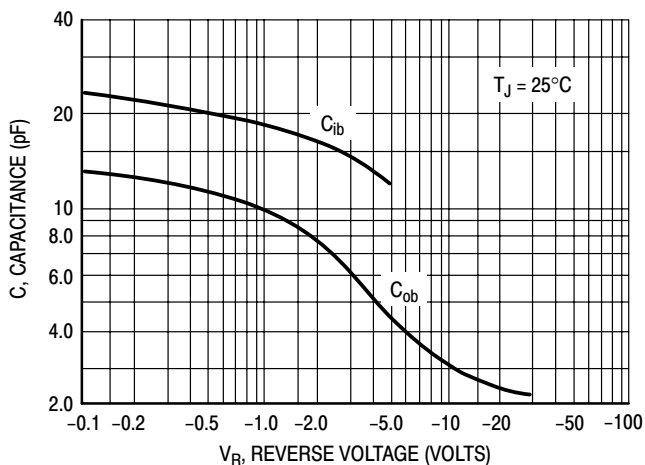


Figure 11. Capacitance

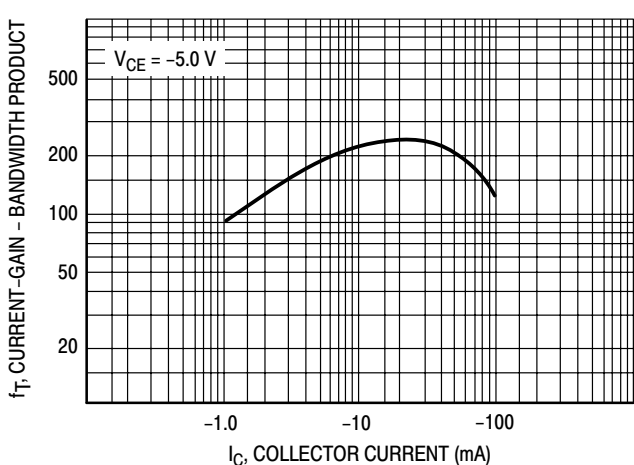


Figure 12. Current-Gain - Bandwidth Product