

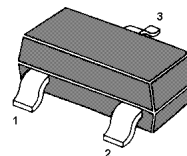
BC856...BC860-AH

PNP Silicon Epitaxial Transistor

for switching and amplifier applications

Features

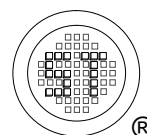
- AEC-Q101 Qualified
- Halogen and Antimony Free(HAF), RoHS compliant



1. Base 2. Emitter 3. Collector
TO-236 Plastic Package

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

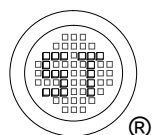
Parameter		Symbol	Value	Unit
Collector Base Voltage	BC856	$-V_{\text{CBO}}$	80	V
	BC857, BC860	$-V_{\text{CBO}}$	50	V
	BC858, BC859	$-V_{\text{CBO}}$	30	V
Collector Emitter Voltage	BC856	$-V_{\text{CEO}}$	65	V
	BC857, BC860	$-V_{\text{CEO}}$	45	V
	BC858, BC859	$-V_{\text{CEO}}$	30	V
Emitter Base Voltage		$-V_{\text{EBO}}$	5	V
Collector Current		$-I_{\text{C}}$	100	mA
Peak Collector Current		$-I_{\text{CM}}$	200	mA
Power Dissipation		P_{tot}	200	mW
Junction Temperature		T_{j}	150	$^\circ\text{C}$
Storage Temperature Range		T_{stg}	- 55 to + 150	$^\circ\text{C}$



BC856...BC860-AH

Characteristics at $T_a = 25^\circ\text{C}$

Parameter		Symbol	Min.	Max.	Unit
DC Current Gain at $-V_{CE} = 5\text{ V}$, $-I_C = 2\text{ mA}$	Current Gain Group A B C	h_{FE} h_{FE} h_{FE}	125 220 420	250 475 800	- - -
Collector Base Cutoff Current at $-V_{CB} = 30\text{ V}$		$-I_{CBO}$	-	15	nA
Collector Base Breakdown Voltage at $-I_C = 10\text{ }\mu\text{A}$	BC856 BC857, BC860 BC858, BC859	$-V_{(BR)CBO}$ $-V_{(BR)CBO}$ $-V_{(BR)CBO}$	80 50 30	- - -	V V V
Collector Emitter Breakdown Voltage at $-I_C = 10\text{ }\mu\text{A}$	BC856 BC857, BC860 BC858, BC859	$-V_{(BR)CES}$ $-V_{(BR)CES}$ $-V_{(BR)CES}$	80 50 30	- - -	V V V
Collector Emitter Breakdown Voltage at $-I_C = 10\text{ mA}$	BC856 BC857, BC860 BC858, BC859	$-V_{(BR)CEO}$ $-V_{(BR)CEO}$ $-V_{(BR)CEO}$	65 45 30	- - -	V V V
Emitter Base Breakdown Voltage at $-I_E = 1\text{ }\mu\text{A}$		$-V_{(BR)EBO}$	5	-	V
Collector Emitter Saturation Voltage at $-I_C = 10\text{ mA}$, $-I_B = 0.5\text{ mA}$ at $-I_C = 100\text{ mA}$, $-I_B = 5\text{ mA}$		$-V_{CE(sat)}$ $-V_{CE(sat)}$	- -	0.3 0.65	V V
Base Emitter On Voltage at $-I_C = 2\text{ mA}$, $-V_{CE} = 5\text{ V}$ at $-I_C = 10\text{ mA}$, $-V_{CE} = 5\text{ V}$		$-V_{BE(on)}$ $-V_{BE(on)}$	0.6 -	0.75 0.82	V V
Current Gain Bandwidth Product at $-V_{CE} = 5\text{ V}$, $-I_C = 10\text{ mA}$, $f = 100\text{ MHz}$		f_T	100	-	MHz
Collector Output Capacitance at $-V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$		C_{ob}	-	6	pF



Electrical Characteristics Curves

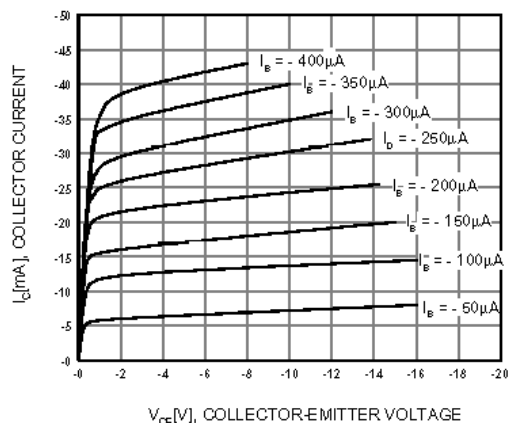


Figure 1. Static Characteristic

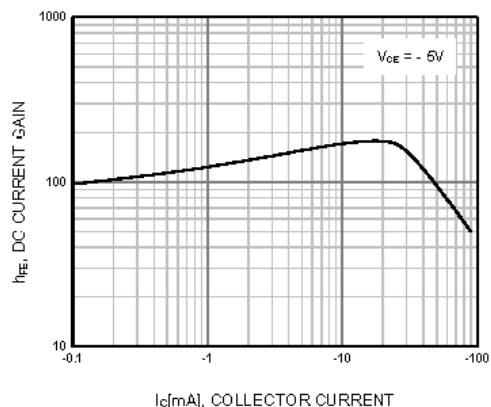


Figure 2. DC current Gain

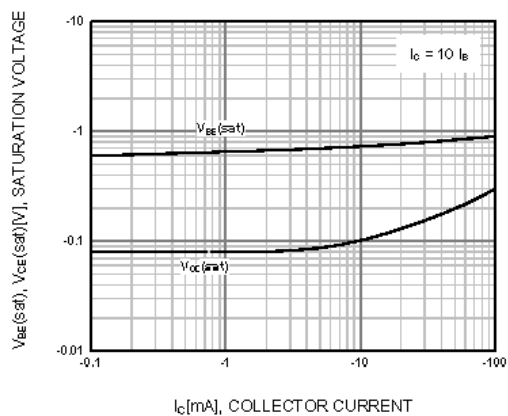


Figure 3. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

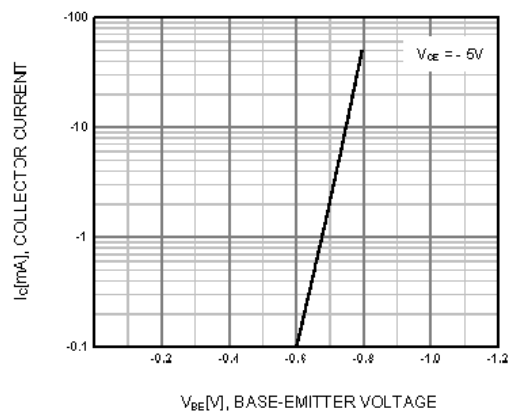


Figure 4. Base-Emitter On Voltage

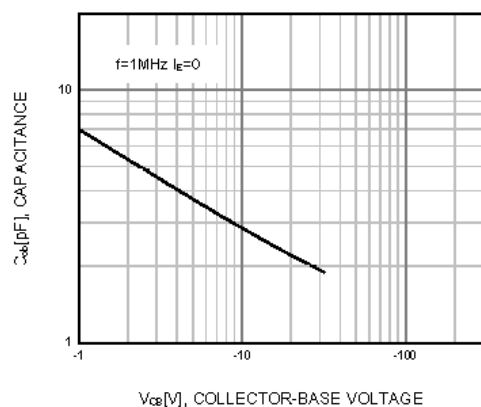


Figure 5. Collector Output Capacitance

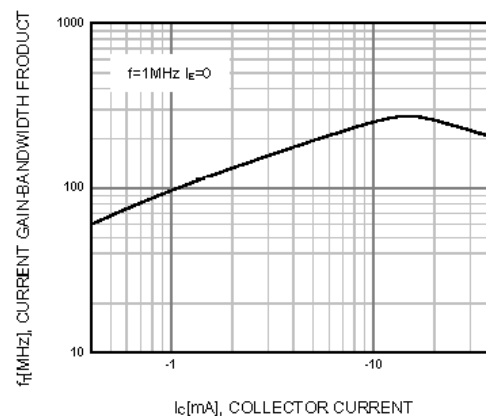
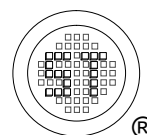


Figure 6. Current Gain Bandwidth Product



TO-236



Marking information

