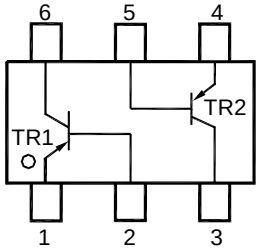
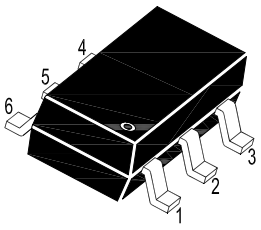
BC856DW…BC860DW

PNP Silicon Epitaxial Planar Transistor

for general purpose and switching applications





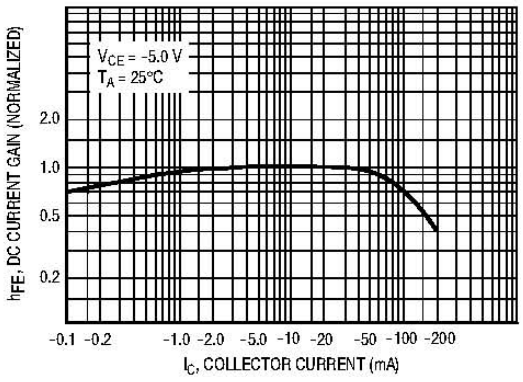
1. Emitter 2. Base 3. Collector
4. Emitter 5. Base 6. Collector
SOT-363 Plastic Package

Absolute Maximum Ratings (T_a = 25℃)

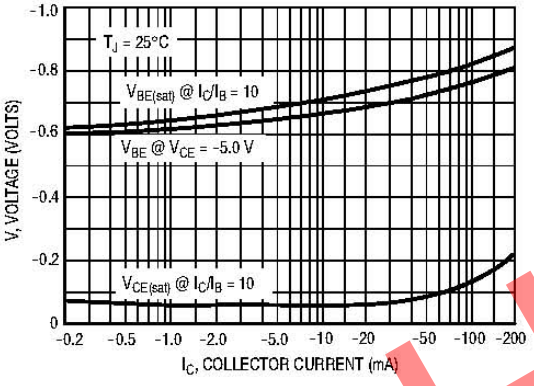
Parameter	Symbol	Value	Unit
Collector Base Voltage BC856DW BC857DW BC858DW BC859DW BC860DW	$-V_{CBO}$	 80 50 30 30 50	V
Collector Emitter Voltage BC856DW BC857DW BC858DW BC859DW BC860DW	$-V_{CEO}$	 65 45 30 30 45	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	100	mA
Peak Collector Current	$-I_{CM}$	100	mA
Total Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{Stg}	- 55 to + 150	℃

Characteristics at T_a = 25℃

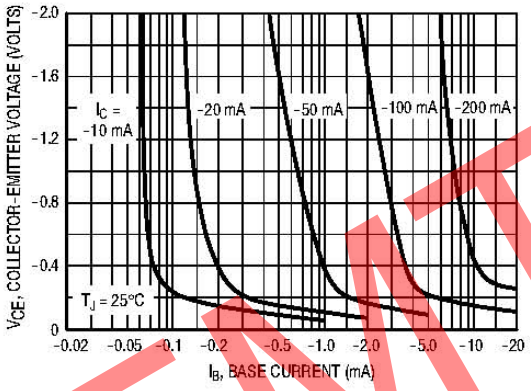
Parameter		Symbol	Min.	Max.	Unit
DC Current Gain					
at $-V_{CE}$ = 5 V, $-I_C$ = 2 mA	BC856ADW~BC860ADW	h_{FE}	125	250	-
	BC856BDW~BC860BDW	h_{FE}	220	475	-
	BC856CDW~BC860CDW	h_{FE}	420	800	-
Collector Base Voltage					
at $-I_C$ = 10 μA					
	BC856DW	$-V_{CBO}$	80	-	V
	BC857DW		50	-	
	BC858DW		30	-	
	BC859DW		30	-	
	BC860DW		50	-	
Collector Emitter Voltage					
at $-I_C$ = 10 mA					
	BC856DW	$-V_{CEO}$	65	-	V
	BC857DW		45	-	
	BC858DW		30	-	
	BC859DW		30	-	
	BC860DW		45	-	
Emitter Base Voltage					
at $-I_E$ = 1 μA		$-V_{EBO}$	5	-	V
Collector Base Cutoff Current					
at $-V_{CB}$ = 30 V		$-I_{CBO}$	-	15	nA
Emitter Base Cutoff Current					
at $-V_{EB}$ = 5 V		$-I_{EBO}$	-	100	nA
Collector Emitter Saturation Voltage					
at $-I_C$ = 10 mA, $-I_B$ = 0.5 mA		$-V_{CE(sat)}$	-	0.3	V
$-I_C$ = 100 mA, $-I_B$ = 5 mA			-	0.65	
Base Emitter Voltage					
at $-V_{CE}$ = 5 V, $-I_C$ = 2 mA		$-V_{BE}$	0.6	0.75	V
$-V_{CE}$ = 5 V, $-I_C$ = 10 mA			-	0.82	
Transition Frequency					
at $-V_{CE}$ = 5 V, $-I_C$ = 10 mA, f = 100 MHz		f_T	100	-	MHz
Output Capacitance					
at $-V_{CB}$ = 10 V, I_E = 0, f = 1 MHz		C_{ob}	-	4.5	pF



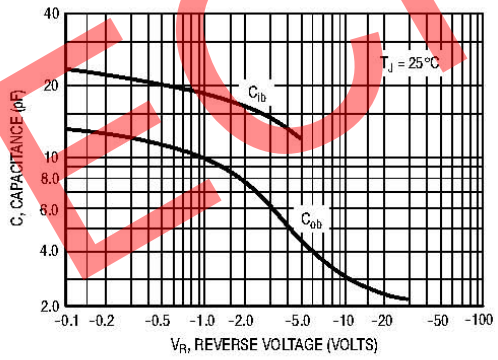
DC Current Gain



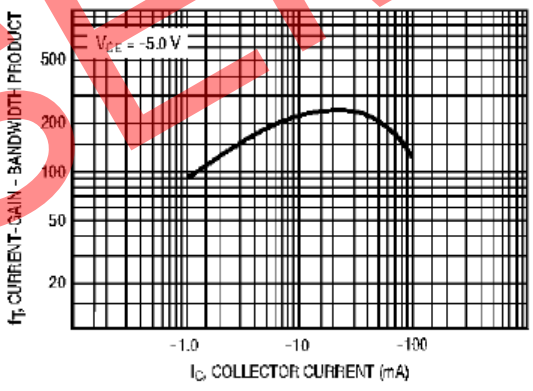
"On" Voltage



Collector Saturation Region



Capacitance



Current–Gain – Bandwidth Product