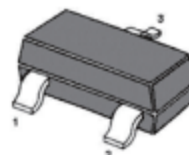


# Small Signal Transistors BC856 BC857 BC858 BC859 BC860

## PNP Silicon Epitaxial Transistor

for switching and amplifier applications



1. Base 2. Emitter 3. Collector  
SOT-23 Plastic Package

# Small Signal Transistors BC856 BC857 BC858 BC859 BC860

Characteristics at $T_a = 25\text{ }^\circ\text{C}$						
Parameter		Symbol	Min.	Max.	Unit	
DC Current Gain at $-V_{CE} = 5\text{ V}$ , $-I_C = 2\text{ mA}$	Current Gain Group	A	$h_{FE}$	125	250	-
		B	$h_{FE}$	220	475	-
		C	$h_{FE}$	420	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	$-V_{(BR)CBO}$	80	-	V	
	BC857, BC860	$-V_{(BR)CBO}$	50	-	V	
	BC858, BC859	$-V_{(BR)CBO}$	30	-	V	
Collector Emitter Breakdown Voltage at $-I_C = 10\text{ }\mu\text{A}$	BC856	$-V_{(BR)CES}$	80	-	V	
	BC857, BC860	$-V_{(BR)CES}$	50	-	V	
	BC858, BC859	$-V_{(BR)CES}$	30	-	V	
Collector Emitter Breakdown Voltage at $-I_C = 10\text{ mA}$	BC856	$-V_{(BR)CEO}$	65	-	V	
	BC857, BC860	$-V_{(BR)CEO}$	45	-	V	
	BC858, BC859	$-V_{(BR)CEO}$	30	-	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 $-I_C = 100\text{ mA}$ , $-I_B = 5\text{ mA}$		$-V_{CE(sat)}$	-	0.3	V	
		$-V_{CE(sat)}$	-	0.65	V	
Base Emitter On Voltage at $-V_{CE} = 5\text{ V}$ , $-I_C = 2\text{ mA}$ at $-V_{CE} = 5\text{ V}$ , $-I_C = 10\text{ mA}$		$-V_{BE(on)}$	0.6	0.75	V	
		$-V_{BE(on)}$	-	0.82	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	