



## SOT-323 Plastic-Encapsulate Transistors

**BC856W** TRANSISTOR (PNP)

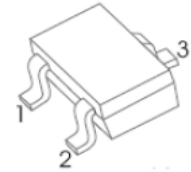
**BC857W**

**BC858W**

### FEATURES

- Ideally suited for automatic insertion
- For Switching and AF Amplifier Applications

**SOT-323**



1. BASE
2. EMITTER
3. COLLECTOR

### MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage		
	BC856W	-80	V
	BC857W	-50	
	BC858W	-30	
V <sub>CEO</sub>	Collector-Emitter Voltage		
	BC856W	-65	V
	BC857W	-45	
	BC858W	-30	
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>c</sub>	Collector Current –Continuous	-0.1	A
P <sub>C*</sub>	Collector Power Dissipation	150	mW
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature	-65-150	°C

### DEVICE MARKING

BC856AW=3A; BC856BW=3B;  
BC857AW=3E; BC857BW=3F;BC857CW=3G;  
BC858AW=3J; BC858BW=3K; BC858CW=3L

**ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)**

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage <b>BC856W</b> <b>BC857W</b> <b>BC858W</b>	V <sub>CBO</sub>	I <sub>C</sub> = -10μA, I <sub>E</sub> =0	-80 -50 -30		V
Collector-emitter breakdown voltage <b>BC856W</b> <b>BC857W</b> <b>BC858W</b>	V <sub>CEO</sub>	I <sub>C</sub> = -10mA, I <sub>B</sub> =0	-65 -45 -30		V
Emitter-base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> = -1μA, I <sub>C</sub> =0	-5		V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = -30 V , I <sub>E</sub> =0		-15	nA
DC current gain <b>BC856AW, 857AW,858AW</b> <b>BC856BW, 857BW,858BW</b> <b>BC857CW,BC858CW</b>	h <sub>FE</sub>	V <sub>CE</sub> = -5V, I <sub>C</sub> = -2mA	125 220 420	250 475 800	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-100mA, I <sub>B</sub> = -5mA		-0.65	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = -100mA, I <sub>B</sub> = -5mA		-1.1	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = -5V, I <sub>C</sub> = -10mA f=100MHz	100		MHz
Collector capacitance	C <sub>ob</sub>	V <sub>CB</sub> =-10V, f=1MHz		4.5	pF