

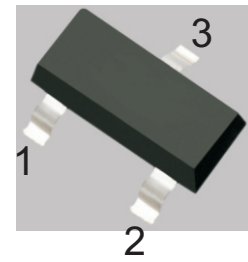
**BC856 BC857 BC858**

**PNP TRANSISTOR**

**FEATURES**

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

**SOT-23**



1.BASE  
2.EMITTER  
3.COLLECTOR

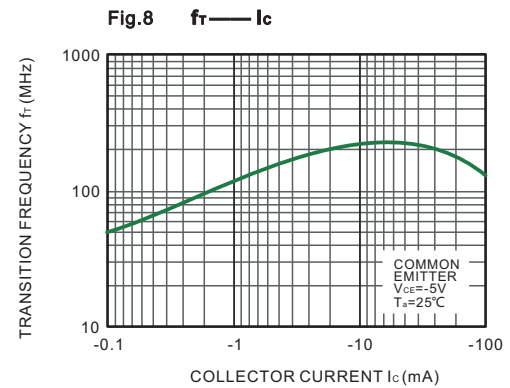
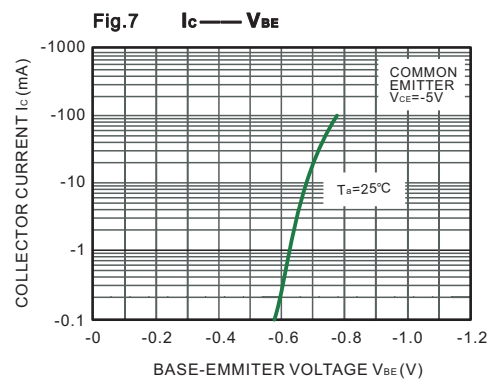
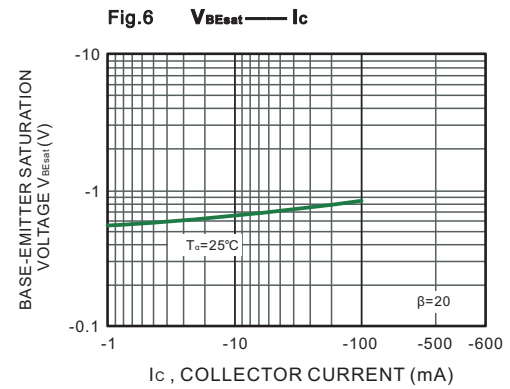
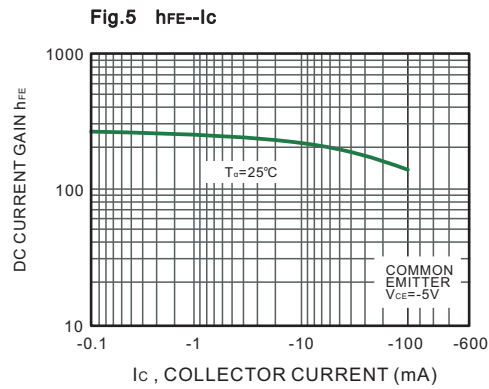
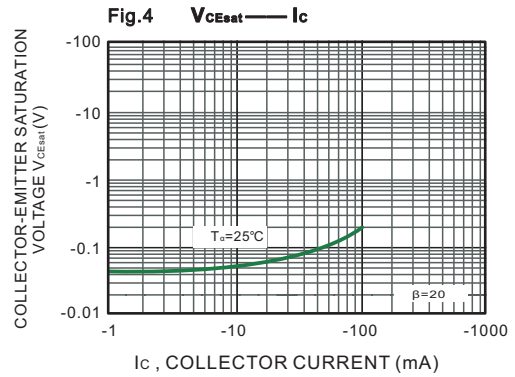
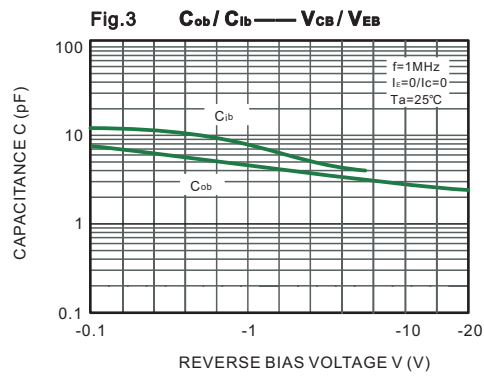
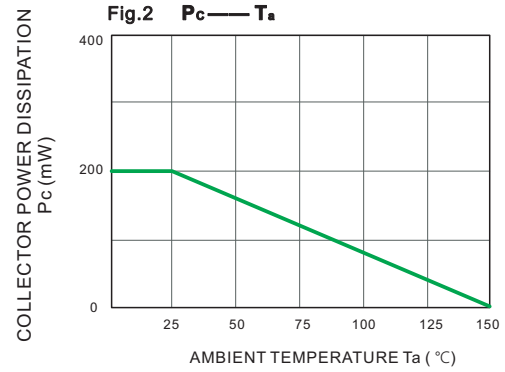
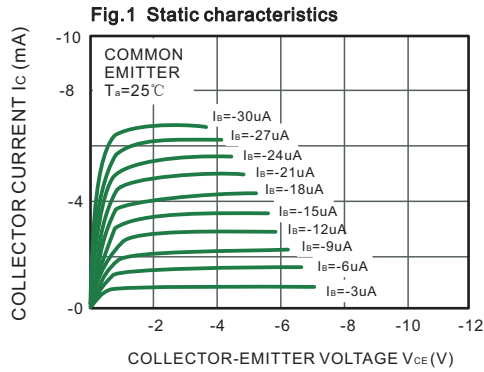
**MAXIMUM RATINGS (Ta=25°C unless otherwise noted)**

Parameter	Symbol	Value	Unit
Collector–Base Voltage	V <sub>CBO</sub>	BC856 -80	V
		BC857 -50	
		BC858 -30	
Collector–Emitter Voltage	V <sub>CEO</sub>	BC856 -65	V
		BC857 -45	
		BC858 -30	
Emitter–Base Voltage	V <sub>EBO</sub>	-5	V
Collector Current — Continuous	I <sub>C</sub>	-0.1	A
Collector Power Dissipation	P <sub>C</sub>	200	mW
Thermal Resistance From Junction To Ambient	R <sub>thJA</sub>	625	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-65~+150	°C

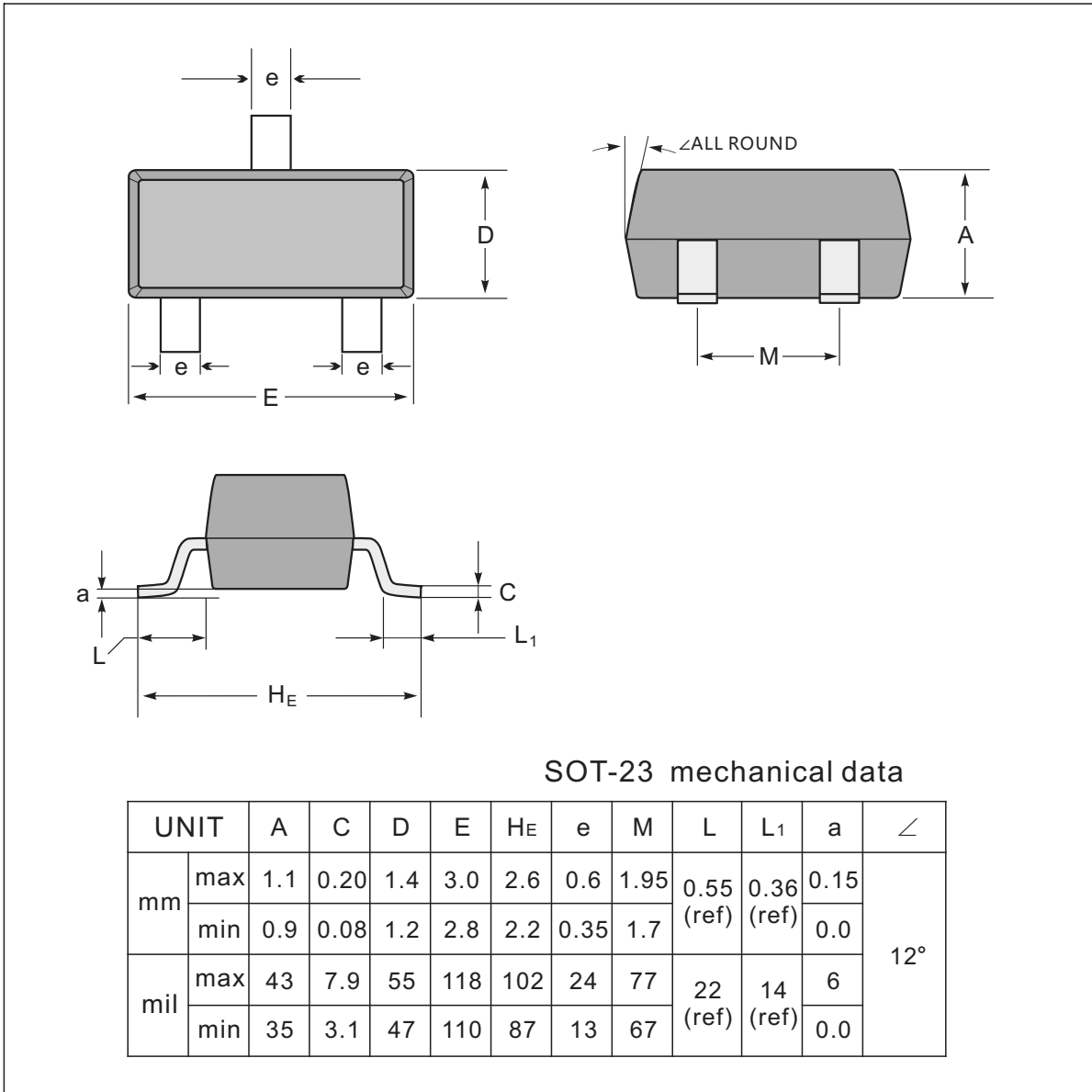
**ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted.)**

Parameter	Symbol	Test conditions	Min	Max	Unit		
Collector-base breakdown voltage	V <sub>CBO</sub>	I <sub>C</sub> = -10μA, I <sub>E</sub> = 0	BC856 -80		V		
			BC857 -50				
			BC858 -30				
Collector-emitter breakdown voltage	V <sub>CEO</sub>	I <sub>C</sub> = -10mA, I <sub>B</sub> = 0	BC856 -65		V		
			BC857 -45				
			BC858 -30				
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> = -70V, I <sub>E</sub> = 0 V <sub>CB</sub> = -45V, I <sub>E</sub> = 0 V <sub>CB</sub> = -25V, I <sub>E</sub> = 0		-0.1	μA		
Collector cut-off current			I <sub>CEO</sub>	V <sub>CE</sub> = -60V, I <sub>B</sub> = 0 V <sub>CE</sub> = -40V, I <sub>B</sub> = 0 V <sub>CE</sub> = -25V, I <sub>B</sub> = 0		-0.1	μA
Collector cut-off current					I <sub>EBO</sub>	V <sub>EB</sub> = -5V, I <sub>C</sub> = 0	
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = -5V, I <sub>C</sub> = -2mA					BC856A, 857A, 858A 220
			BC856B, 857B, 858B 420	800			
			BC857C, BC858C				
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = -100mA, I <sub>B</sub> = -5mA		-0.5	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		

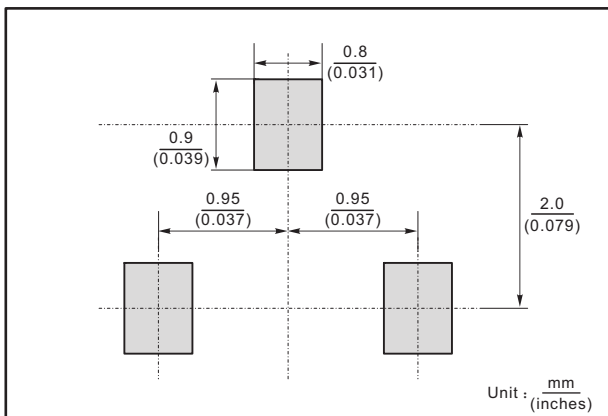
**TYPICAL CHARACTERISTICS**



**SOT-23 Package Outline Dimensions**



**The recommended mounting pad size**



**Marking**

Type number	Marking code
BC856A	3A
BC856B	3B
BC857A	3E
BC857B	3F
BC857C	3G
BC858A	3J
BC858B	3K
BC858C	3L