

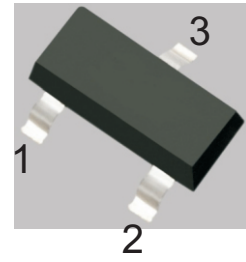
BC856 BC857 BC858

PNP TRANSISTOR

FEATURES

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

SOT-23



1.BASE
2.EMITTER
3.COLLECTOR

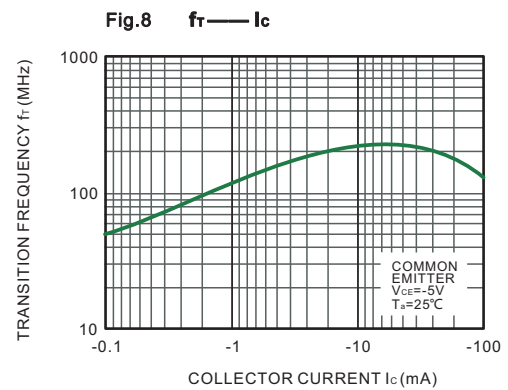
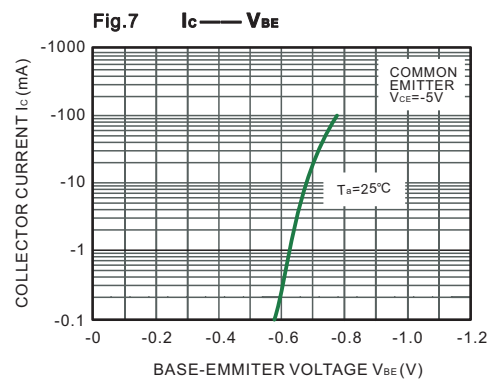
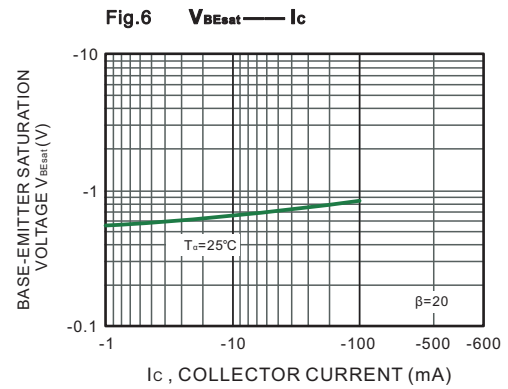
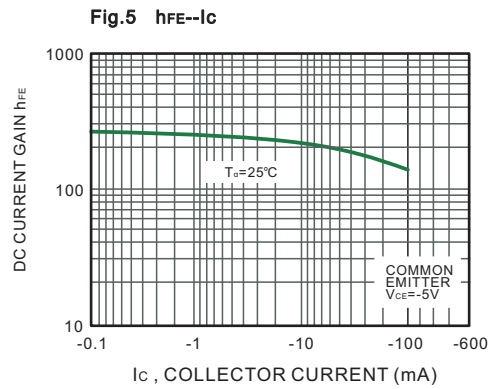
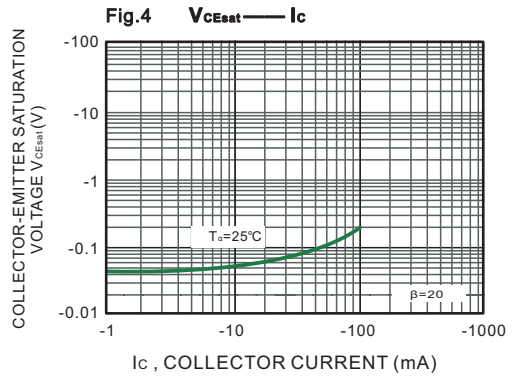
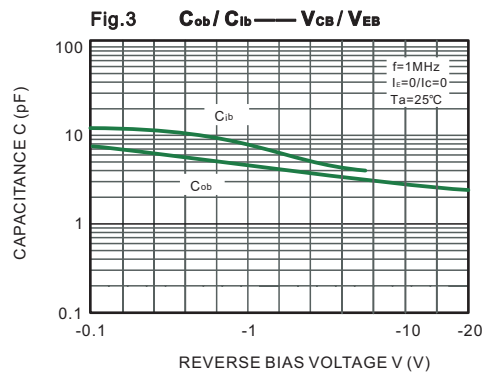
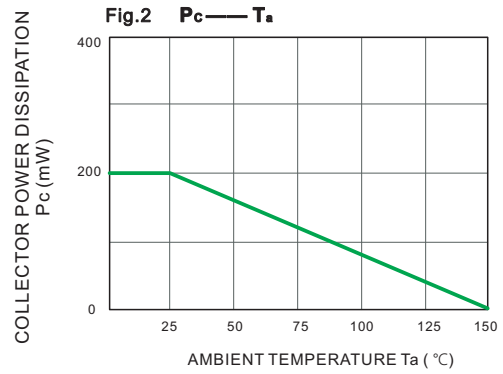
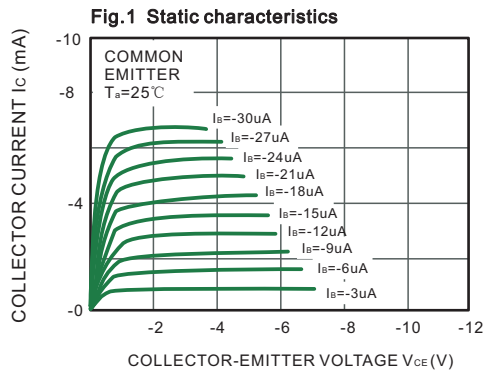
MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit	
Collector–Base Voltage	BC856 BC857 BC858	V_{CBO}	-80 -50 -30	V
Collector–Emitter Voltage	BC856 BC857 BC858	V_{CEO}	-65 -45 -30	V
Emitter–Base Voltage		V_{EBO}	-5	V
Collector Current — Continuous		I_C	-0.1	A
Collector Power Dissipation		P_C	200	mW
Thermal Resistance From Junction To Ambient		R_{thJA}	625	°C/W
Junction Temperature		T_J	150	°C
Storage Temperature		T_{stg}	-65~+150	°C

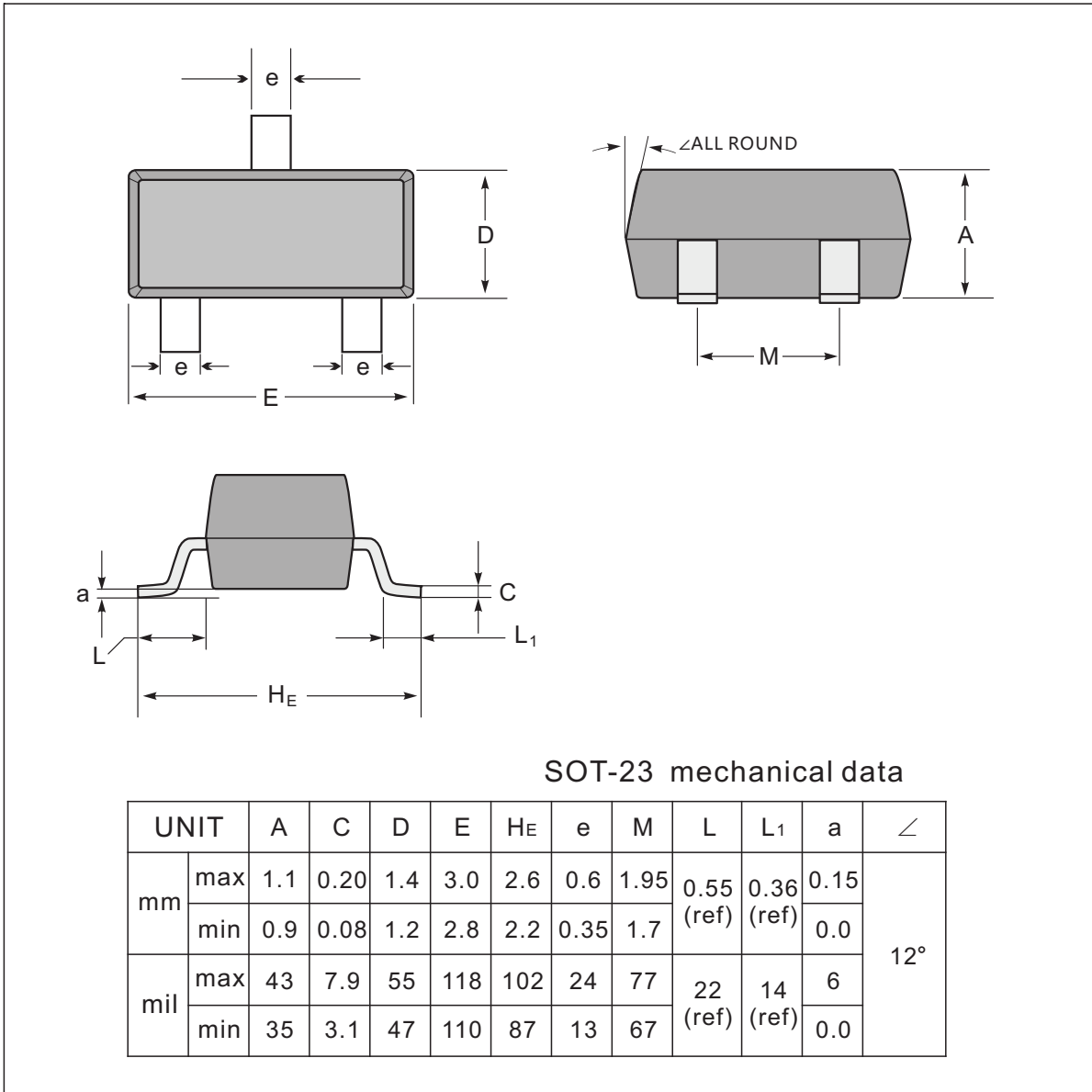
ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted.)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	BC856 BC857 BC858	V_{CBO}	$I_C = -10\mu A, I_E = 0$	-80 -50 -30	V
Collector-emitter breakdown voltage	BC856 BC857 BC858	V_{CEO}	$I_C = -10mA, I_B = 0$	-65 -45 -30	V
Emitter-base breakdown voltage		V_{EBO}	$I_E = -1\mu A, I_C = 0$	-5	V
Collector cut-off current	BC856 BC857 BC858	I_{CBO}	$V_{CB} = -70V, I_E = 0$ $V_{CB} = -45V, I_E = 0$ $V_{CB} = -25V, I_E = 0$	-0.1	μA
Collector cut-off current	BC856 BC857 BC858	I_{CEO}	$V_{CE} = -60V, I_B = 0$ $V_{CE} = -40V, I_B = 0$ $V_{CE} = -25V, I_B = 0$	-0.1	μA
Emitter cut-off current		I_{EBO}	$V_{EB} = -5V, I_C = 0$	-0.1	μA
DC current gain	BC856A,857A,858A BC856B,857B,858B BC857C,BC858C	h_{FE}	$V_{CE} = -5V, I_C = -2mA$	125 220 420	250 475 800
Collector-emitter saturation voltage		$V_{CE(sat)}$	$I_C = -100mA, I_B = -5mA$	-0.5	V
Base-emitter saturation voltage		$V_{BE(sat)}$	$I_C = -100mA, I_B = -5mA$	-1.1	V
Transition frequency		f_T	$V_{CE} = -5V,$ $I_C = -10mA, f = 100MHz$	100	MHz
Collector capacitance		C_{ob}	$V_{CB} = -10V, f = 1MHz$	4.5	pF

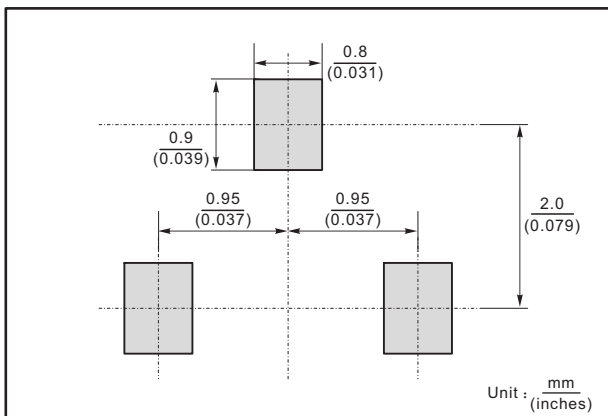
TYPICAL CHARACTERISTICS



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