



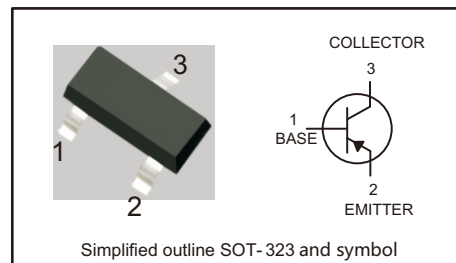
PNP TRANSISTOR

FEATURES

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

PINNING

PIN	DESCRIPTION
1	BASE
2	EMITTER
3	COLLECTOR



CLASSIFICATION OF h_{FE1}

Rank	A	B	C
Range	125-250	220-475	420-800

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

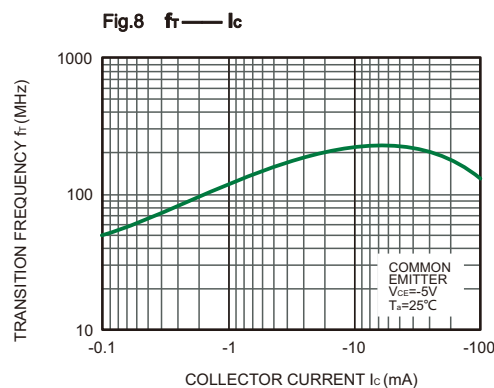
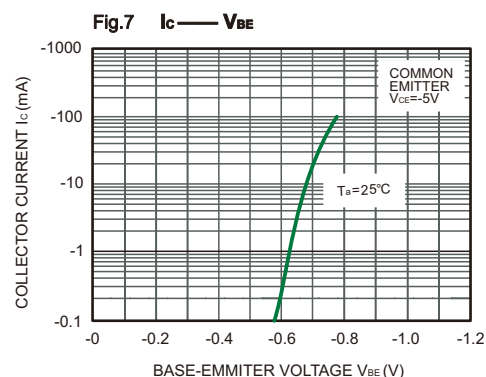
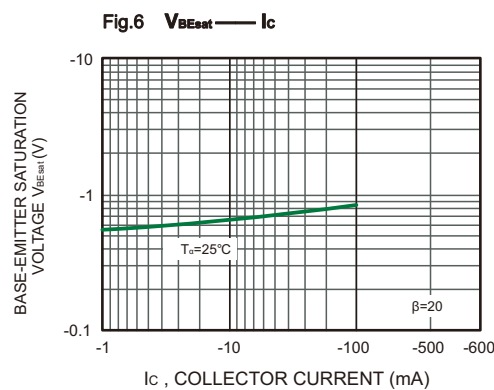
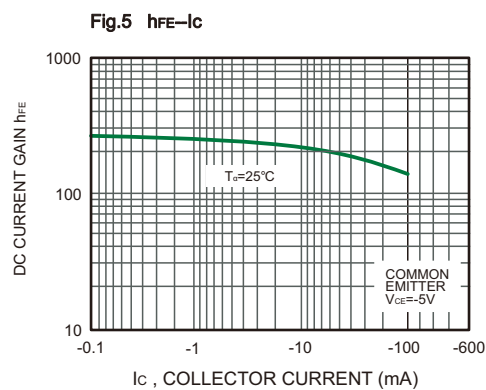
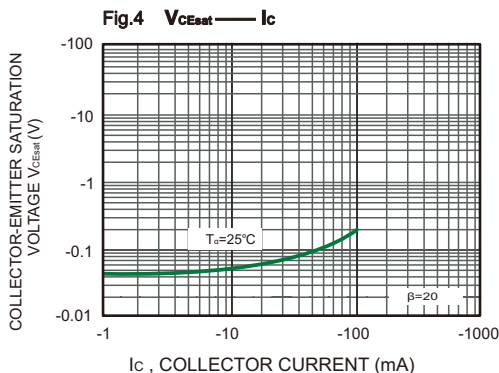
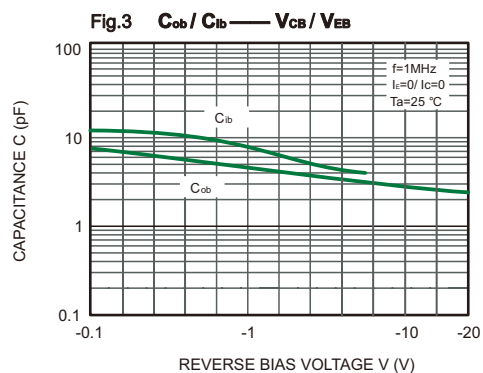
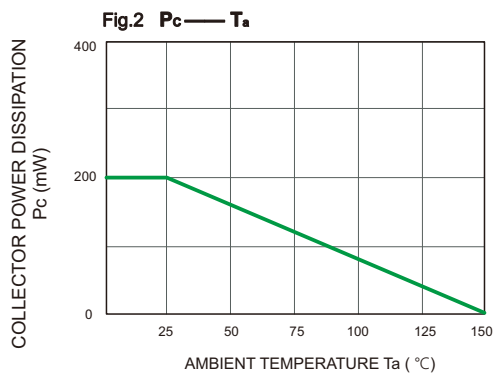
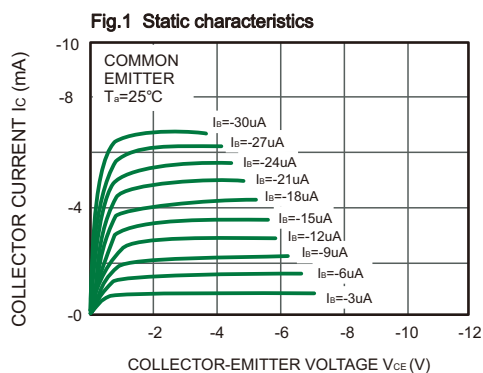
Parameter	Symbol	Value	Unit	
Collector–Base Voltage	BC856 BC857 BC858	V_{CBO}	-80 -50 -30	V
Collector–Emitter Voltage	BC856 BC857 BC858	V_{CEO}	-65 -45 -30	V
Emitter–Base Voltage		V_{EBO}	-5	V
Collector Current — Continuous		I_C	-0.1	A
Collector Power Dissipation		P_C	200	mW
Thermal Resistance From Junction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

ELECTRICAL CHARACTERISTICS ($T_A = 25^{\circ}\text{C}$ unless otherwise noted.)

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

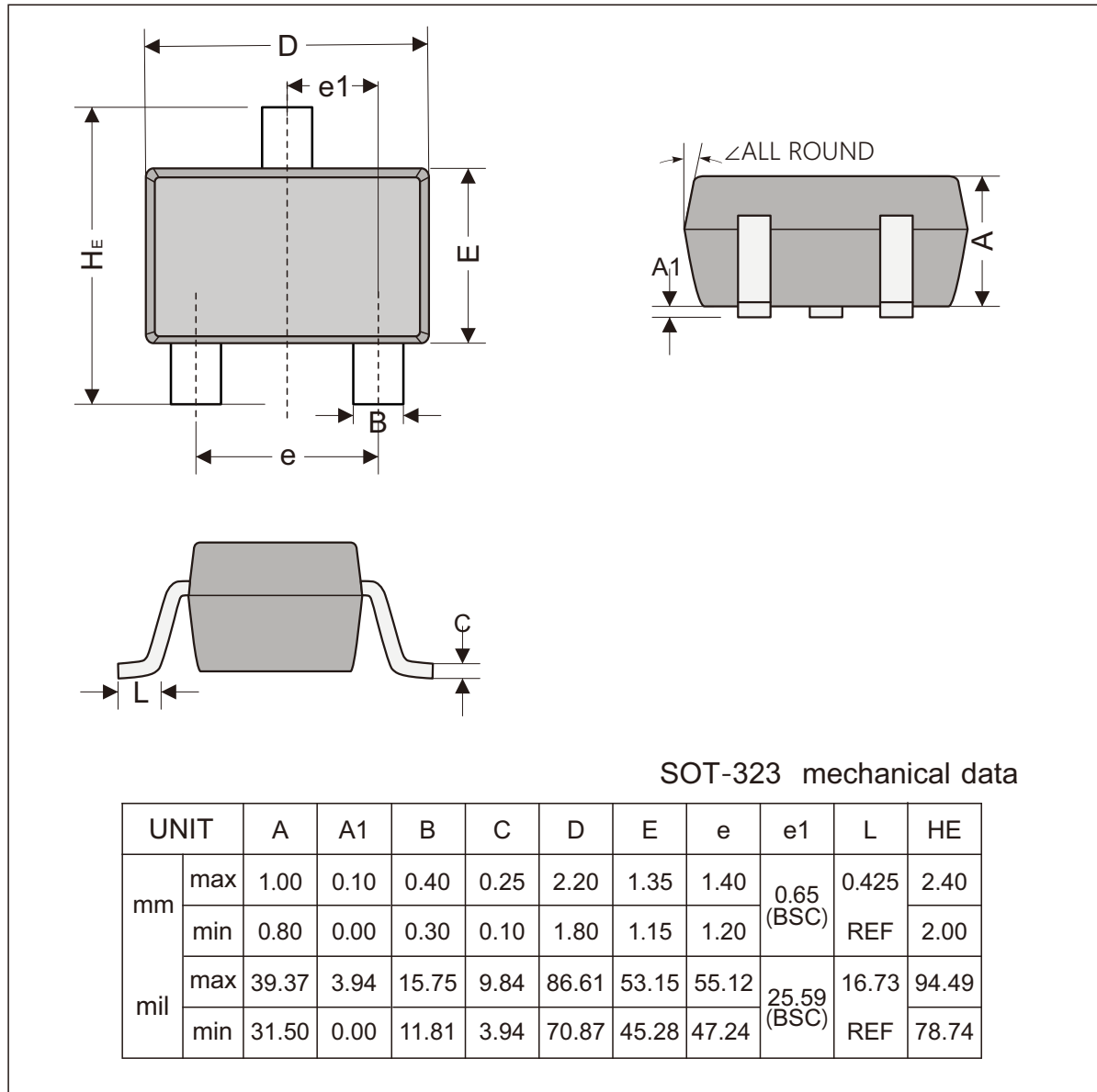


TYPICAL CHARACTERISTICS

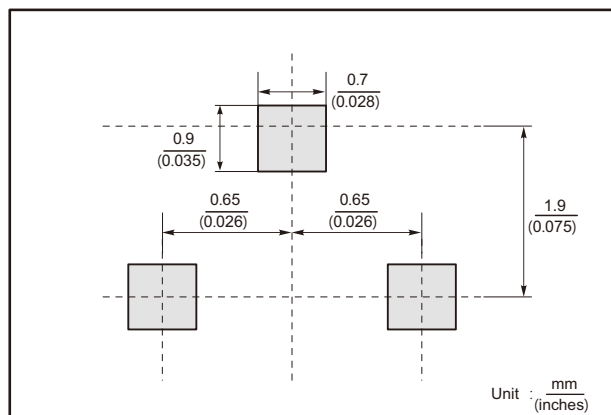




SOT-323 Package Outline Dimensions



The recommended mounting pad size



Marking

Type number	Marking code
BC856WGA	56A
BC856WGB	56B
BC857WGA	57A
BC857WGB	57B
BC857WGC	57C
BC858WGA	58A
BC858WGB	58B
BC858WGC	58C



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