

BC856W,BC857W,BC858W SERIES

PNP GENERAL PURPOSE TRANSISTORS

VOLTAGE 30/45/65 Volt **POWER** 150 mWatt

SOT-323

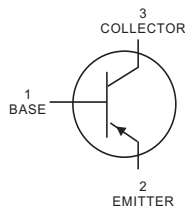
Unit:mm

FEATURES

- Ideally suited for automatic insertion
- For Switching and AF Amplifier Applications
- Lead free in compliance with EU RoHS

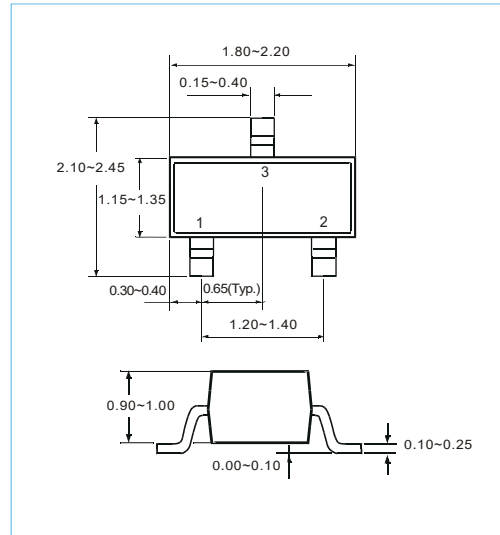
MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



DEVICE MARKING

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



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

Symbol	Parameter	Value	Unit
V_{CB0}	Collector-Base Voltage	BC856W	-80
		BC857W	-50
		BC858W	-30
V_{CEO}	Collector-Emitter Voltage	BC856W	-65
		BC857W	-45
		BC858W	-30
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current –Continuous	-0.1	A
P_C	Collector Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	833	$^{\circ}\text{C}/\text{W}$
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-65~+150	$^{\circ}\text{C}$

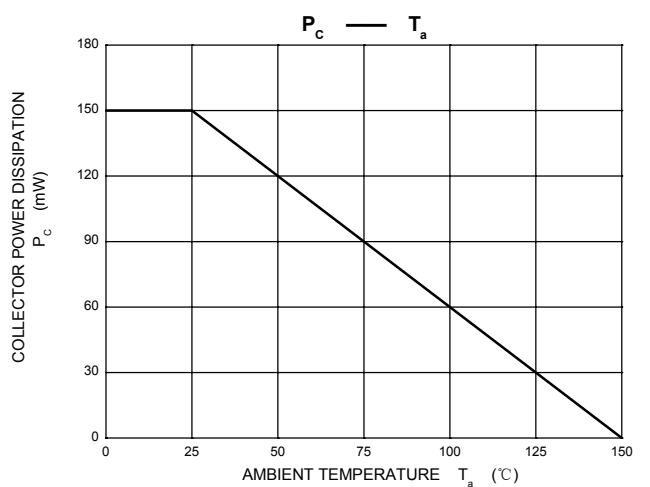
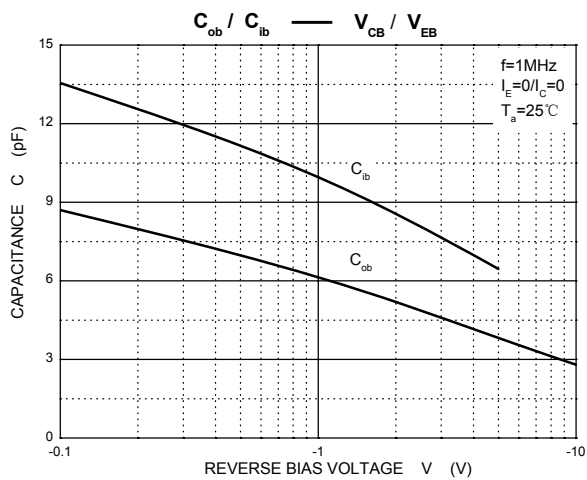
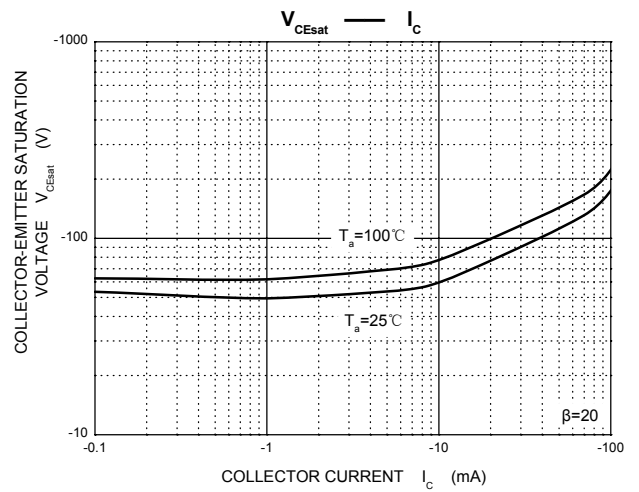
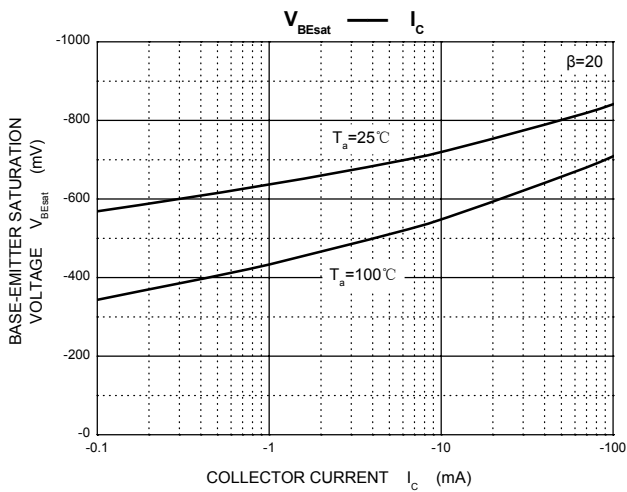
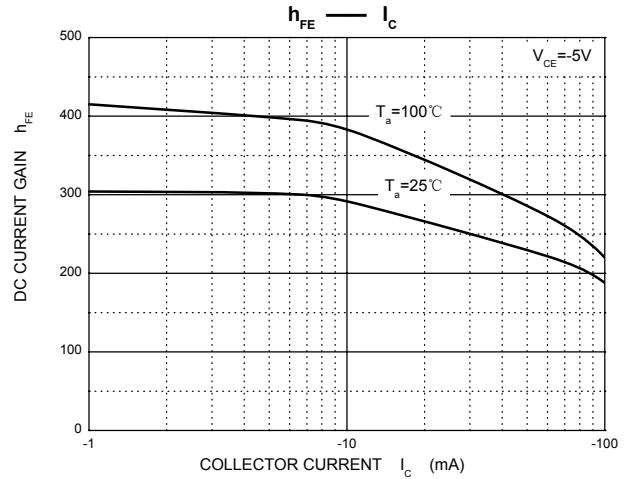
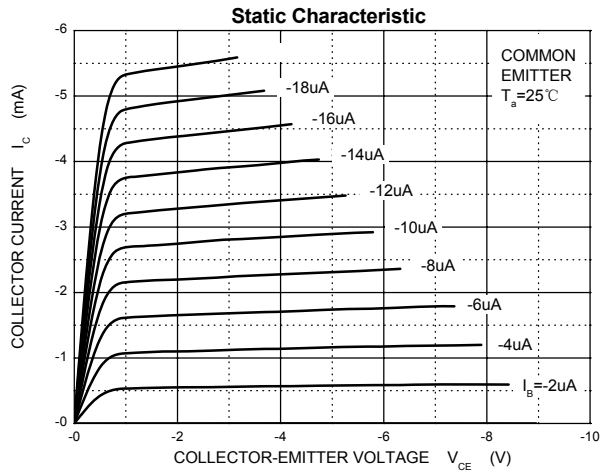
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ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	BC856W BC857W BC858W	V_{CBO}	$I_C = -10\mu\text{A}, I_E = 0$	-80 -50 -30	V
Collector-emitter breakdown voltage	BC856W BC857W BC858W	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		I_{CBO}	$V_{CB} = -30\text{V}, I_E = 0$	-15	nA
DC current gain	BC856AW,857AW,858AW BC856BW,857BW,858BW BC857CW,BC858CW	h_{FE}	$V_{CE} = -5\text{V}, I_C = -2\text{mA}$	125 220 420	250 475 800
Collector-emitter saturation voltage		$V_{CE(sat)}$	$I_C = -100\text{mA}, I_B = -5\text{mA}$	-0.65	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 output capacitance		C_{ob}	$V_{CB} = -10\text{V}, f = 1\text{MHz}$	4.5	pF

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Typical Characteristics

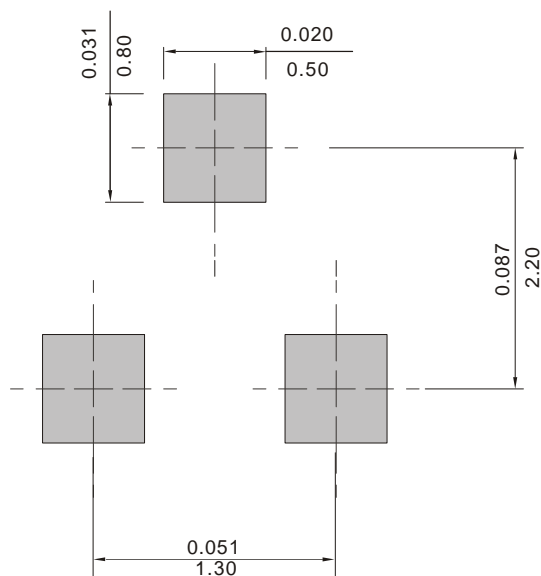


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MOUNTING PAD LAYOUT

SOT-323

Unit:Inch(mm)



ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
BC856W,BC857W,BC858W SERIES	SOT-323	7 Inch	3000