SEMICONDUCTOR

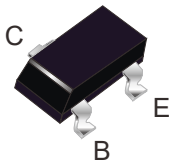
BC856W,BC857W,BC858W

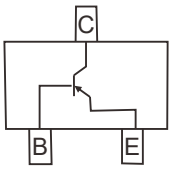
PNP Plastic-Encapsulate Transistors

FEATURES

- Epoxy meets UL-94 V-0 flammability rating
- Complementary to BC846W,BC847W,BC848W
- Power Dissipation of 150mW
- Ideally suited for automatic insertion
- For switching and AF amplifier applications

SOT-323





MECHANICAL DATA

- Case:SOT-323
- Terminals:Plated solderable per MIL-STD-750,method 2026
- Mounting Position: Any
- Marking:BC856AW:3A, BC856BW:3B
  BC857AW:3E, BC857BW:3F, BC857CW:3G
  BC858AW:3J, BC858BW:3K, BC858CW:3L

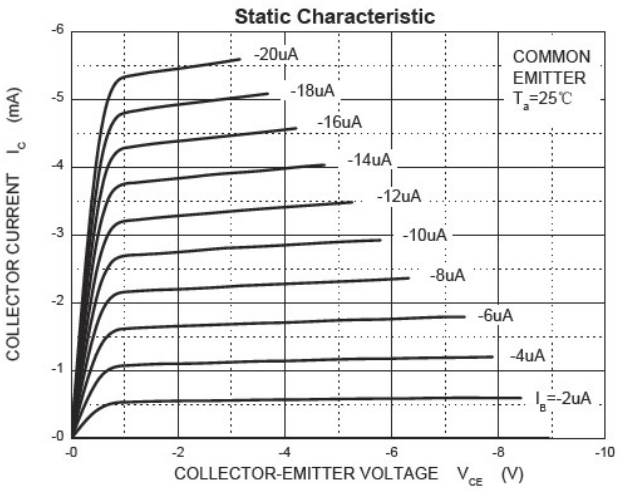
MAXIMUM RATINGS(T_A=25°C Unless otherwise specified)

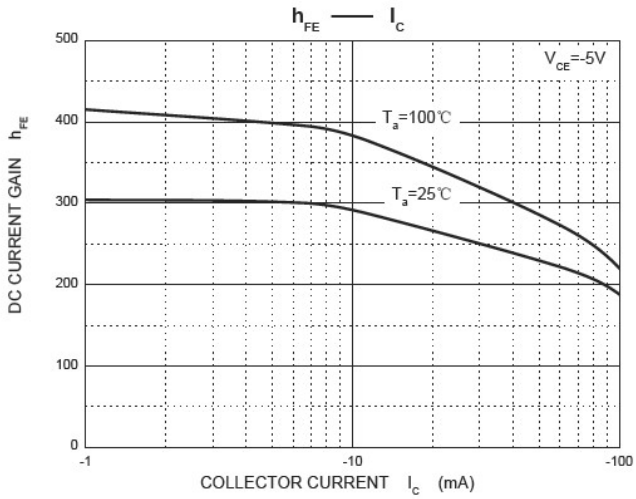
Item	Symbol	Unit	Value	
Collector-Emitter Voltage	V_{CEO}	V	BC856W BC857W BC858W	-65 -45 -30
Collector-Base Voltage	V_{CBO}	V	BC856W BC857W BC858W	-80 -50 -30
Emitter-Base Voltage	V_{EBO}	V	-5.0	
Collector Current, Continuous	I_C	mA	-100	
Power Dissipation	P_D	mW	150	
Operation Junction Temperature	T_J	℃	-55 to +150	
Storage Temperature	T_{STG}	℃	-55 to +150	
Thermal resistance From junction to ambient	$R_{\theta JA}$	℃/W	833	

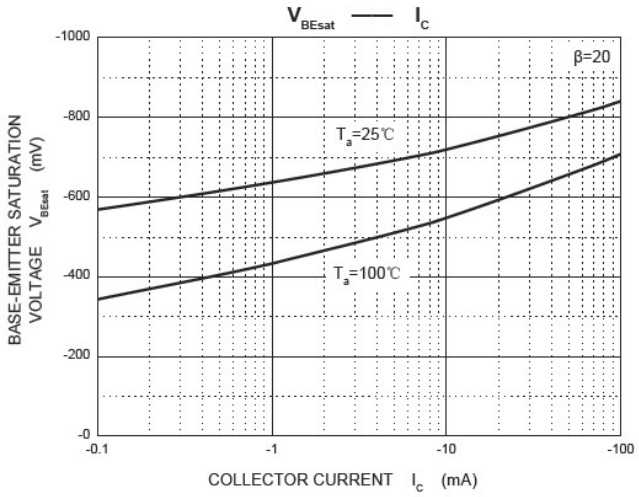
ELECTRICAL CHARACTERISTICS(T_A=25°C Unless otherwise specified)

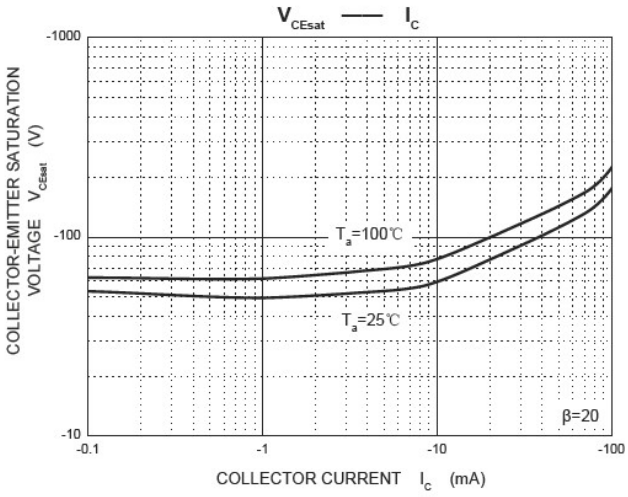
Item	Symbol	Unit	Conditions		Min	Max
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	V	I_C=-10mA,I_B=0	BC856W BC857W BC858W	-65 -45 -30	--- --- ---
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	V	I_C=-10μA,I_E=0	BC856W BC857W BC858W	-80 -50 -30	--- --- ---
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	V	I_E=-1μA,I_C=0		-5.0	---
Collector cut-off Current	I_{CBO}	nA	V_{CB}=-30V,I_E=0		---	-15
DC Current Gain	h_{FE}		I_C=-2mA, V_{CE}=-5V	BC856AW,BC857AW,BC858AW BC856BW,BC857BW,BC858BW BC857CW,BC858CW	125 220 420	250 475 800
Collector-Emitter Saturation Voltage	VCE(set)	V	I_C=-100mA,I_B=-5mA		---	-0.65
Base-Emitter Saturation Voltage	VBE(set)	V	I_C=-100mA,I_B=-5mA		---	-1.1
Output Capacitance	Cob	pF	V_{CB}=-10V,f=1.0MHz,I_E=0		---	4.5
Transition frequency	f_T	MHz	I_C=-10mA,V_{CE}=-5V f=100MHz		100	---

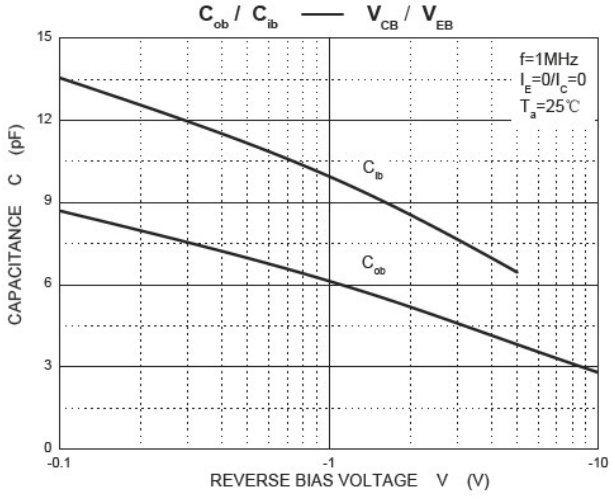
Characteristics(Typical)

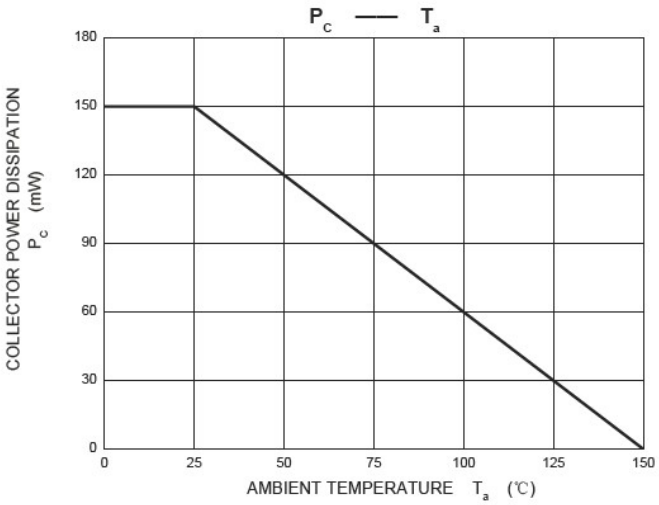






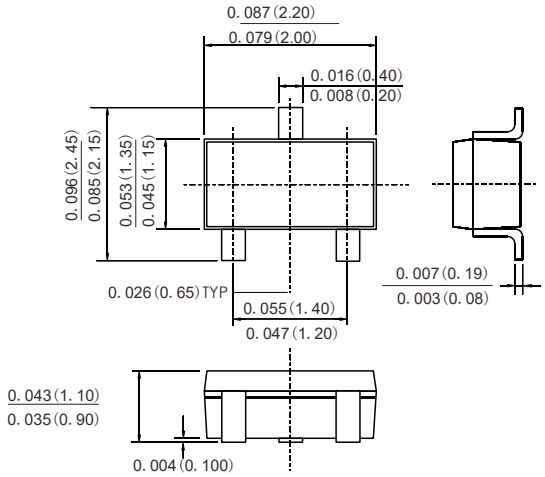






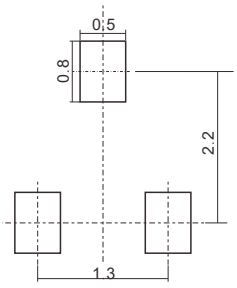
Outline Dimensions

SOT-323



Dimensions in inches and (millimetrers)

Suggested pad layout



Dimensions in millimetrers

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