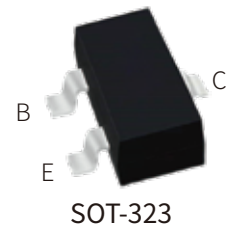


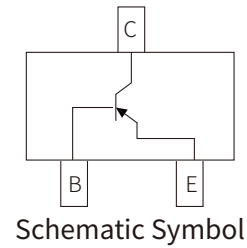
FEATURES

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



MECHANICAL DATA

- Small Outline Plastic Package
- Epoxy UL: 94V-0
- Mounting position: Any



APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

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

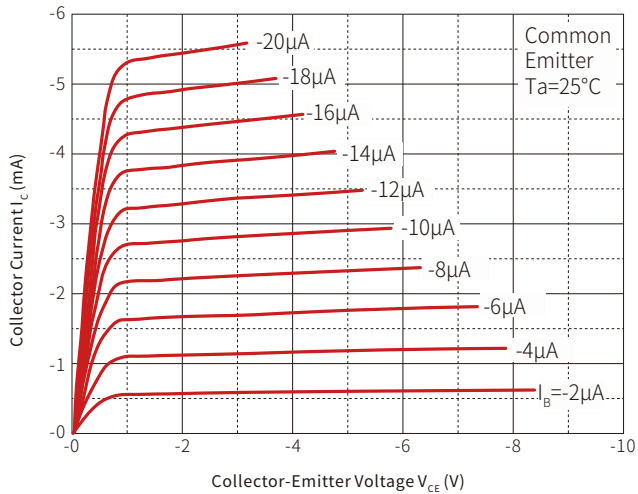
Parameter	Symbol	BC856W		BC857W			BC858W			Unit
Marking		BC 856AW	BC 856BW	BC 857AW	BC 857BW	BC 857CW	BC 858AW	BC 858BW	BC 858CW	
		3A	3B	3E	3F	3G	3J	3K	3L	
Collector-Base Voltage	V _{CBO}	-80		-50			-30			V
Collector-Emitter Voltage	V _{CEO}	-65		-45			-30			V
Emitter-Base Voltage	V _{EBO}	-5								V
Collector Current-Continuous	I _C	-0.1								A
Collector Power Dissipation	P _C	150								mW
Thermal Resistance From Junction to Ambient	R _{θJA}	833								°C/W
Junction Temperature	T _J	-55~+150								°C
Storage Temperature	T _{STG}	-55~+150								°C

ELECTRICAL CHARACTERISTICS (T_A=25°C)

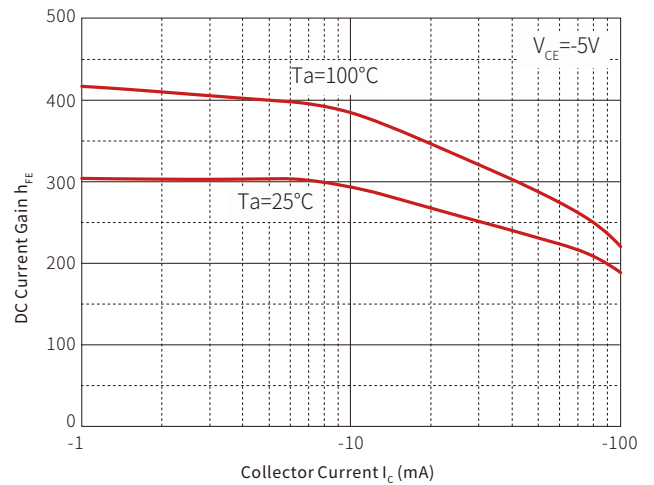
Parameter	Symbol	Test Conditions		Min.	Typ.	Max.	Unit
Collector-base breakdown voltage	V _{CBO}	BC856W	I _C =-10μA, I _E =0	-80			V
		BC857W		-50			
		BC858W		-30			
Collector-emitter breakdown voltage	V _{CEO}	BC856W	I _C =-10mA, I _B =0	-65			V
		BC857W		-45			
		BC858W		-30			
Emitter-base breakdown voltage	V _{EBO}	I _E =-1μA, I _C =0		-5			V
Collector cut-off current	I _{CBO}	V _{CB} = -30V, I _E =0				-15	nA
DC current gain	hFE	BC856AW; BC857AW;BC858AW	V _{CE} = -5V, I _C =-2mA	125		250	
		BC856BW; BC857BW;BC858BW		220		475	
		BC857CW; BC858CW		420		800	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-100mA, I _B =-5mA				-0.65	V
Base -emitter saturation voltage	V _{BE(sat)}	I _C =-100mA, I _B =-5mA				-1.1	V
Transition frequency	fT	V _{CE} =-5V, I _C =-10mA, f=100MHz		100			MHz
Collector output capacitance	Cob	V _{CB} =-10V, f=1MHz				4.5	pF

TYPICAL CHARACTERISTICS

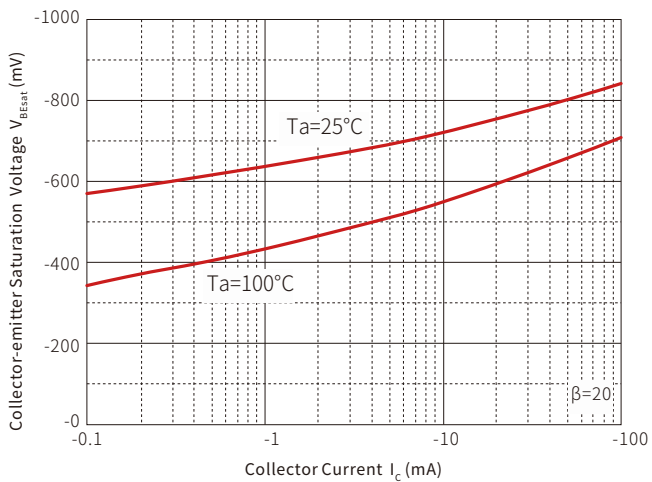
Static Characteristic



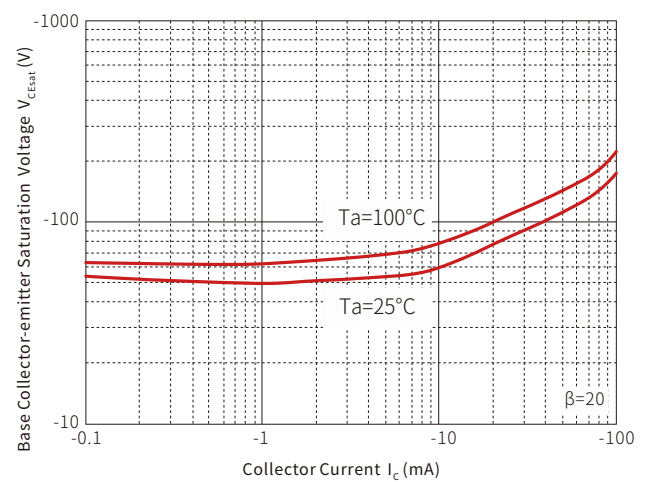
h_{FE} — I_C

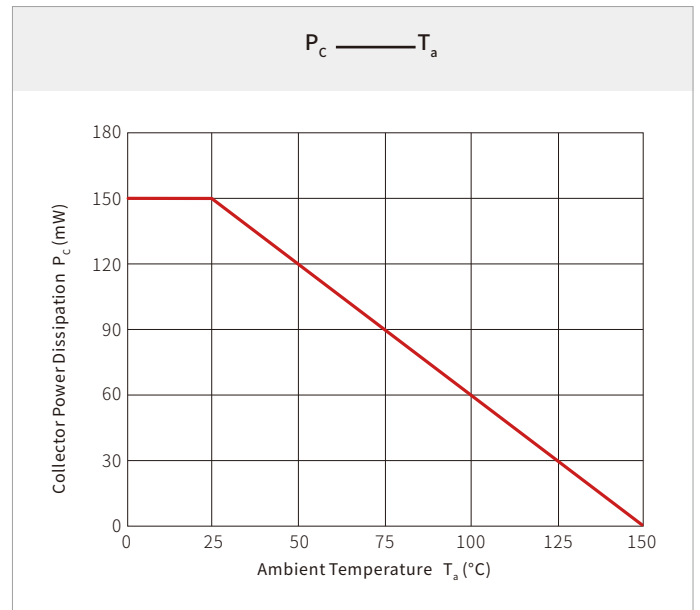
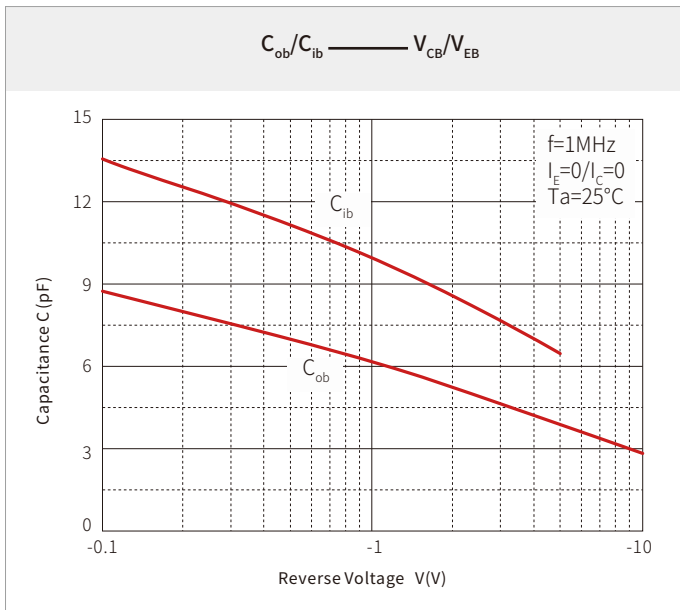


$V_{BE\text{ sat}}$ — I_C

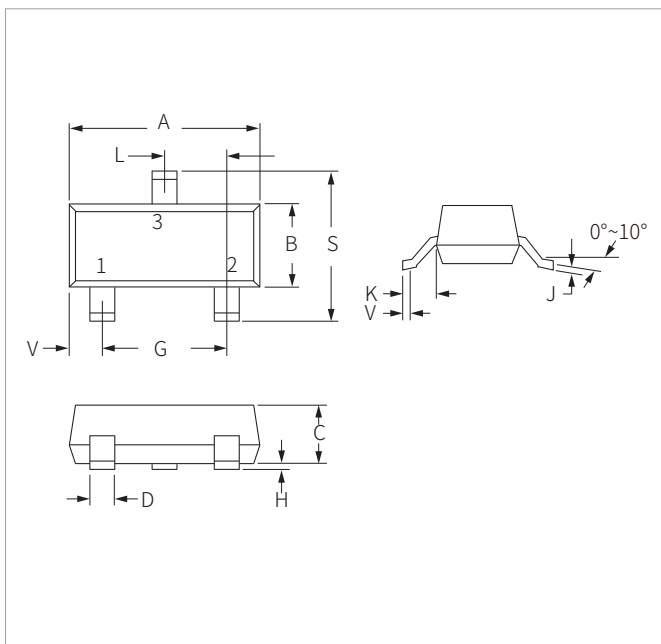


$V_{CE\text{ sat}}$ — I_C



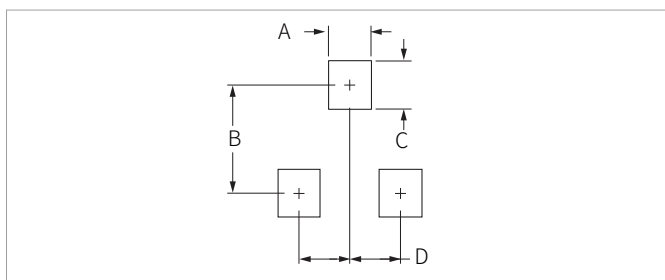


SOT-323 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.00	2.20	0.079	0.087
B	1.15	1.35	0.045	0.053
C	0.80	1.10	0.031	0.043
D	0.20	0.40	0.008	0.016
G	1.20	1.40	0.047	0.055
H	0.00	0.10	0.000	0.004
J	0.08	0.15	0.003	0.006
K	0.525REF		0.021REF	
L	0.650TYP		0.026TYP	
S	2.15	2.45	0.085	0.096
V	0.26	0.46	0.010	0.018

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters	Inches
	NOR	NOR
A	0.50	0.020
B	2.20	0.087
C	0.80	0.031
D	1.30	0.051

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
BC856W-BC858W	SOT-323	3000PCS	7"

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By QR Code

Website



Wechat

To find your local partner within Semiware's global website: www.semiware.com

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