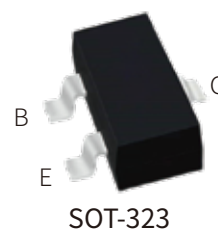


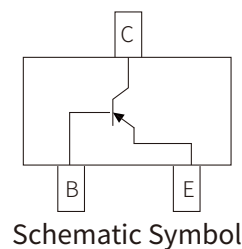
FEATURES

- Ideally suited for automatic insertion
- For Switching and AF Amplifier Applications
- Meet AEC-Q101 Requirements



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°C)

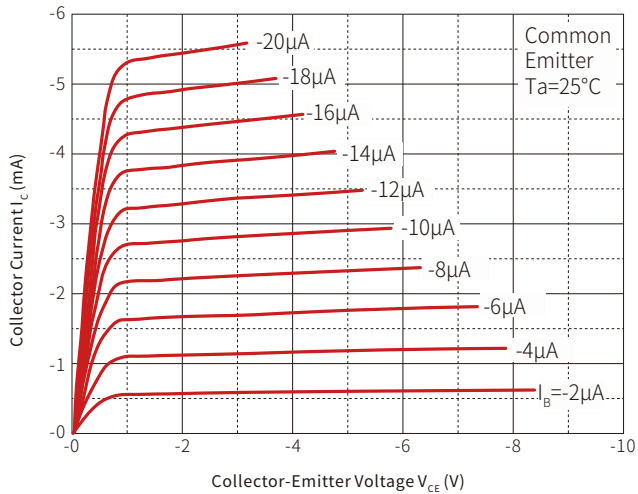
Parameter	Symbol	BC856WQ		BC857WQ			BC858WQ			Unit
Marking		BC 856AWQ	BC 856BWQ	BC 857AWQ	BC 857BWQ	BC 857CWQ	BC 858AWQ	BC 858BWQ	BC 858CWQ	
		3A	3B	3E	3F	3G	3J	3K	3L	
Collector-Base Voltage	V _{CBO}	-80		-50			-30			V
Collector-Emitter Voltage	V _{CEO}	-65		-45			-30			V
Emitter-Base Voltage	V _{EBO}	-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)

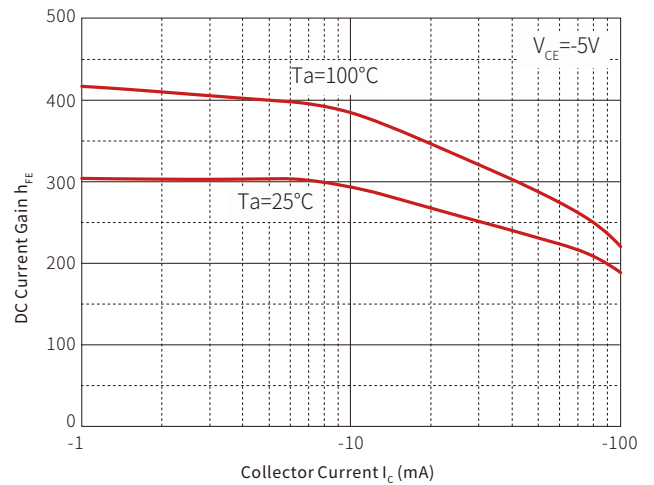
Parameter	Symbol	Test Conditions		Min.	Typ.	Max.	Unit
Collector-base breakdown voltage	V _{CBO}	BC856WQ	I _C =-10μA,I _E =0	-80			V
		BC857WQ		-50			
		BC858WQ		-30			
Collector-emitter breakdown voltage	V _{CEO}	BC856WQ	I _C =-10mA,I _B =0	-65			V
		BC857WQ		-45			
		BC858WQ		-30			
Emitter-base breakdown 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	BC856AWQ; BC857AWQ;BC858AWQ	V _{CE} = -5V, I _C =-2mA	125		250	
		BC856BWQ; BC857BWQ;BC858BWQ		220		475	
		BC857CWQ; BC858CWQ		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

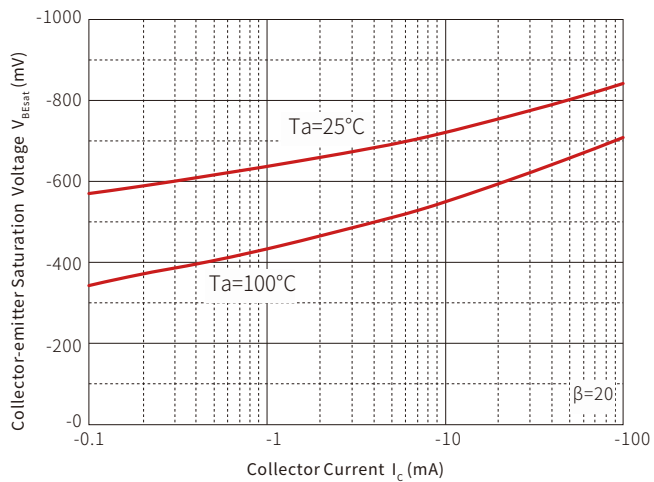
Static Characteristic



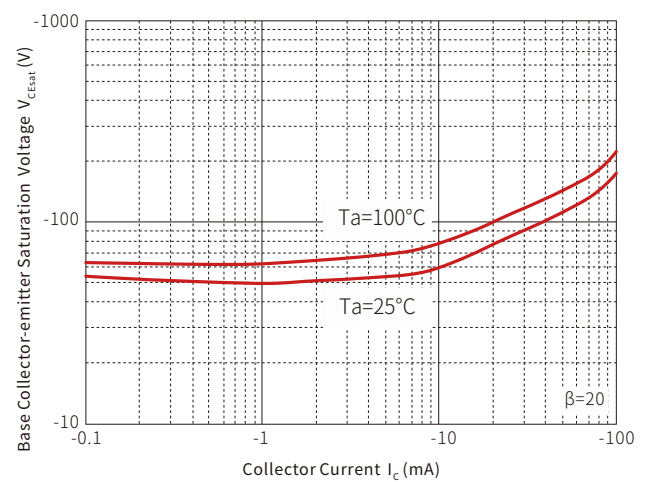
h_{FE} — I_C

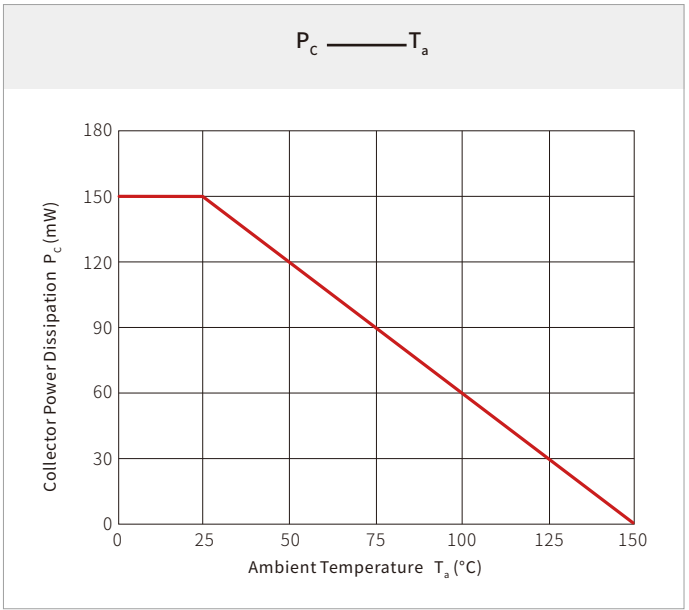
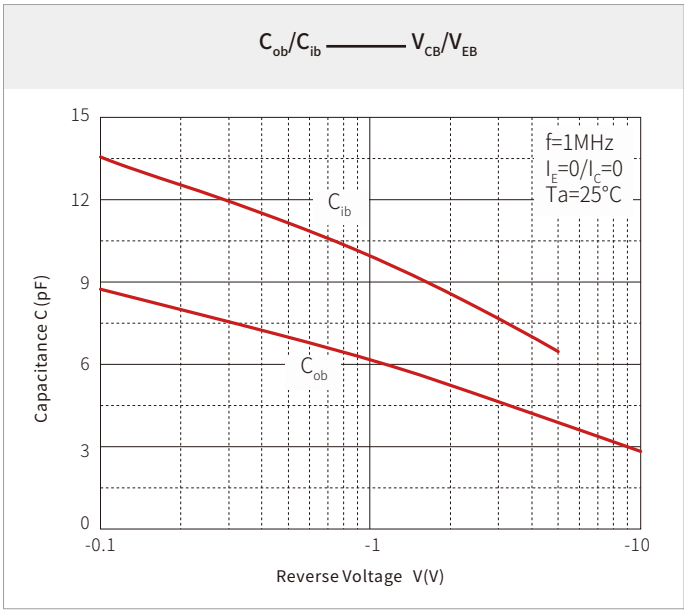


$V_{BE\text{ sat}}$ — I_C

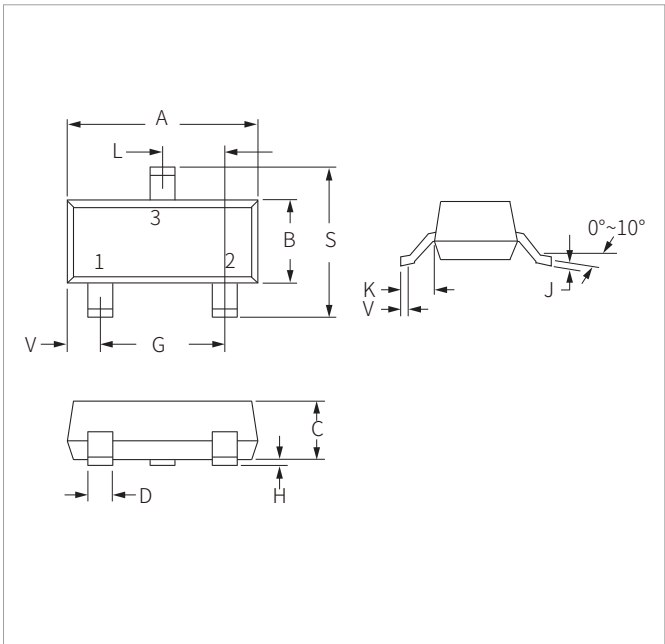


$V_{CE\text{ sat}}$ — I_C



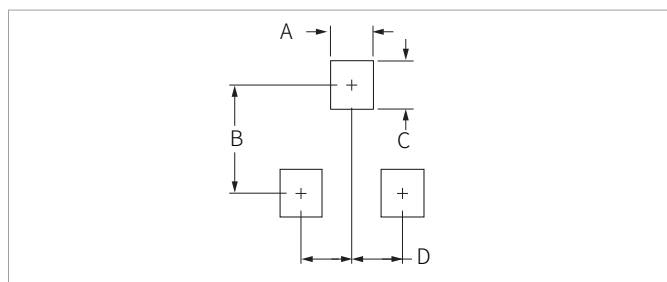


SOT-323 PACKAGE INFORMATION



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
BC856WQ-BC858WQ	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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