

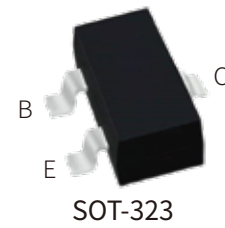
FEATURES

- | Complementary to BC856W/BC857W/BC858W

- | Power Dissipation of 150mW

- | Ideally suited for automatic insertion

- | For switching and AF amplifier applications

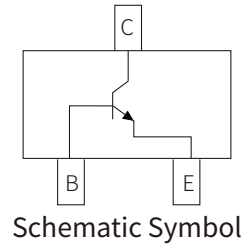


MECHANICAL DATA

- | 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

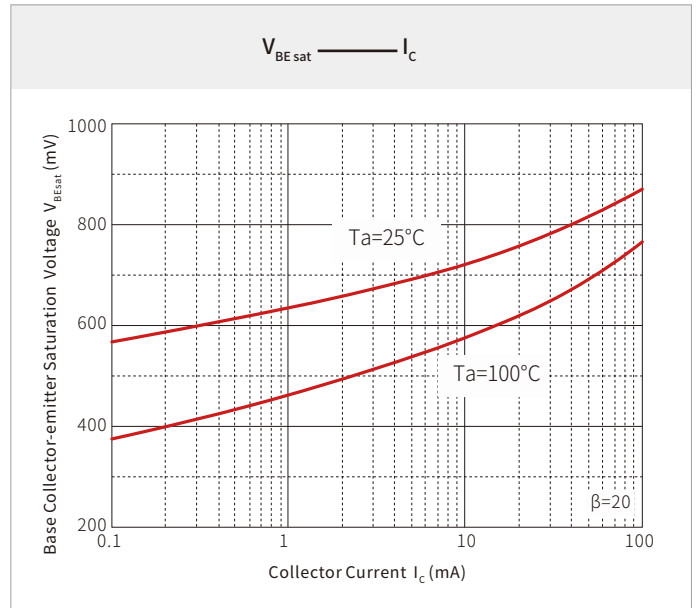
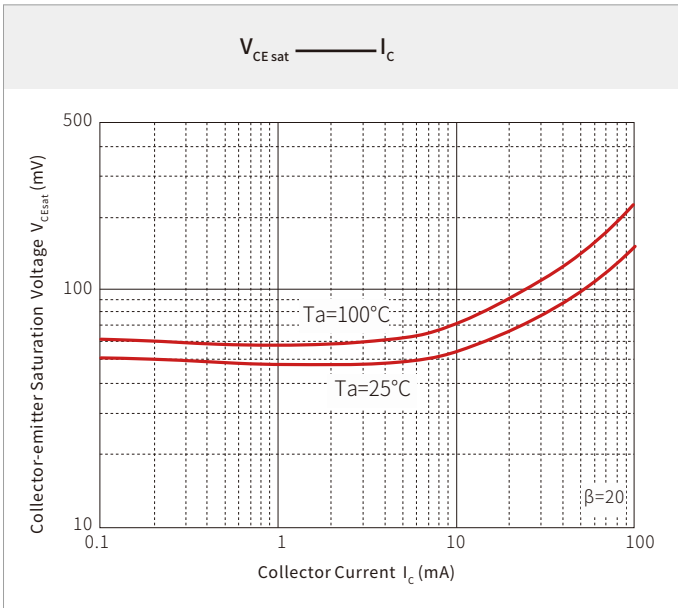
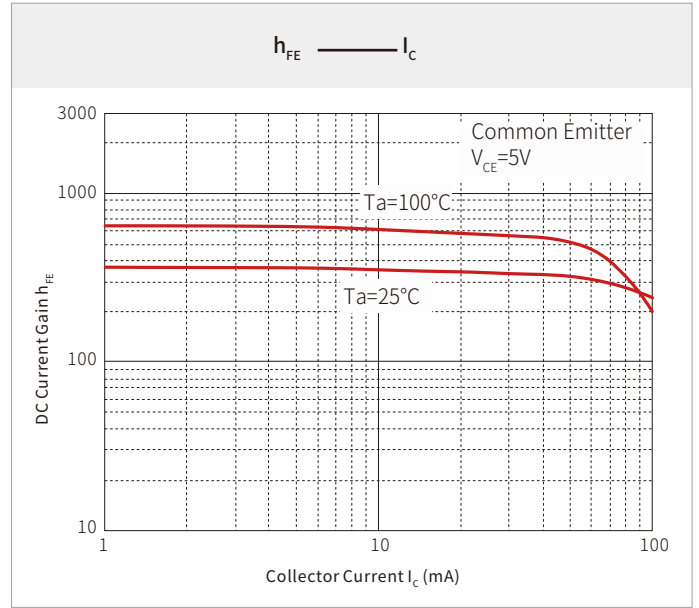
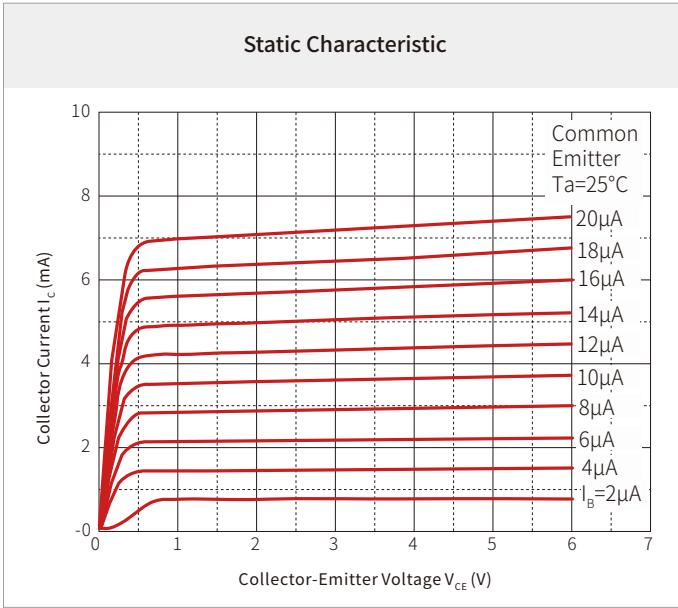
MAXIMUM RATINGS (T_A=25°C)

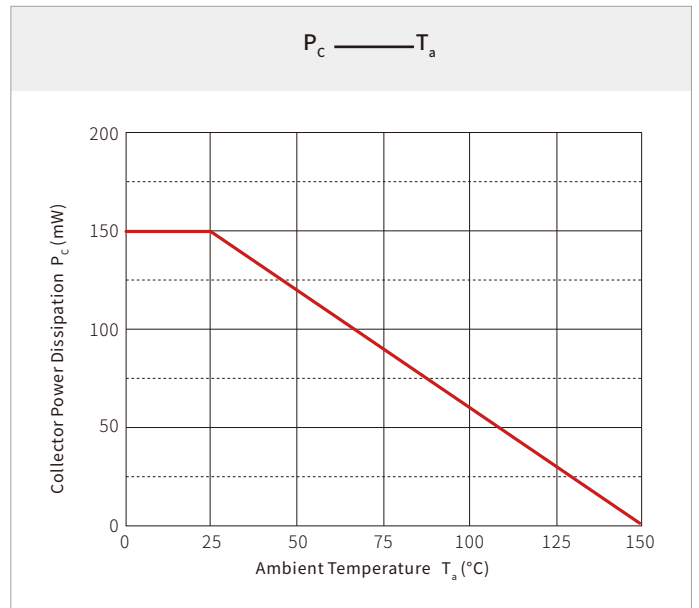
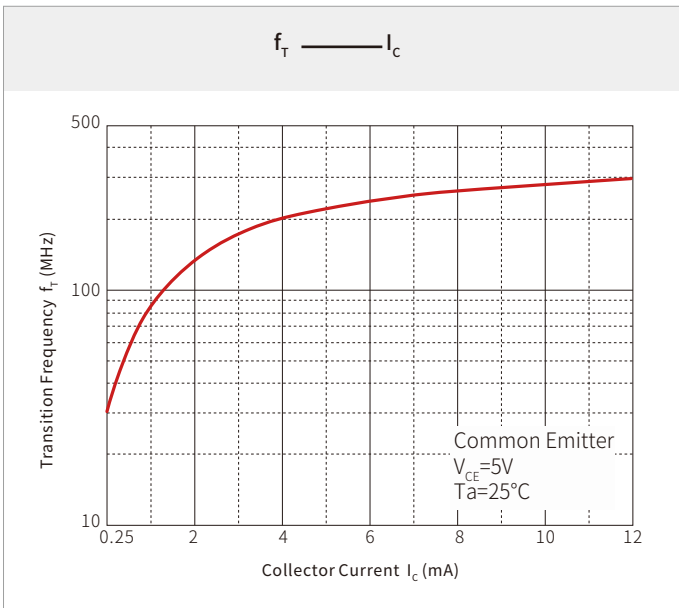
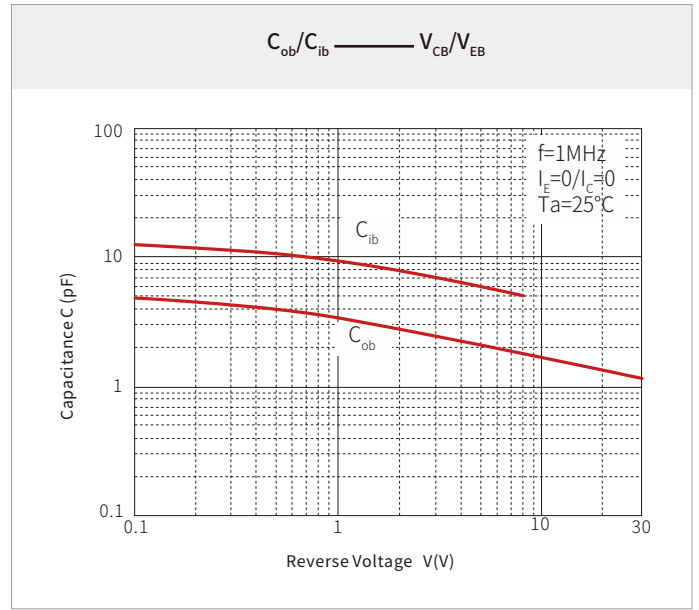
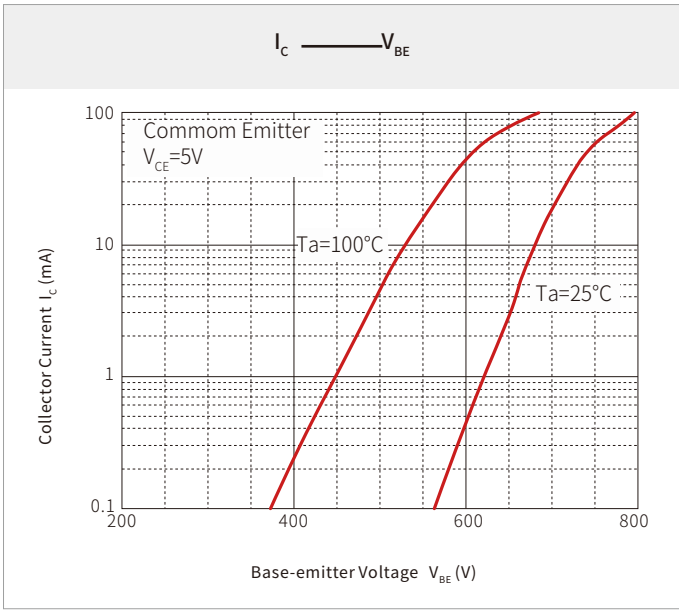
Parameter	Symbol	BC846W		BC847W			BC848W			Unit	
		BC846AW	BC846BW	BC847AW	BC847BW	BC847CW	BC848AW	BC848BW	BC848CW		
		1A	1B	1E	1F	1G	1J	1K	1L		
Collector-Base Voltage	V _{CBO}	80		50			30			V	
Collector-Emitter Voltage	V _{CEO}	65		45			30			V	
Emitter-Base Voltage	V _{EBO}	6		6			5			V	
Collector Current-Continuous	I _C	100									mA
Collector Power Dissipation	P _C	150									mW
Thermal Resistance From Junction to Ambient	R _{θJA}	833									°C/W
Junction Temperature	T _J	150									°C
Storage Temperature	T _{STG}	-55~+150									°C

ELECTRICAL CHARACTERISTICS (T_A=25°C)

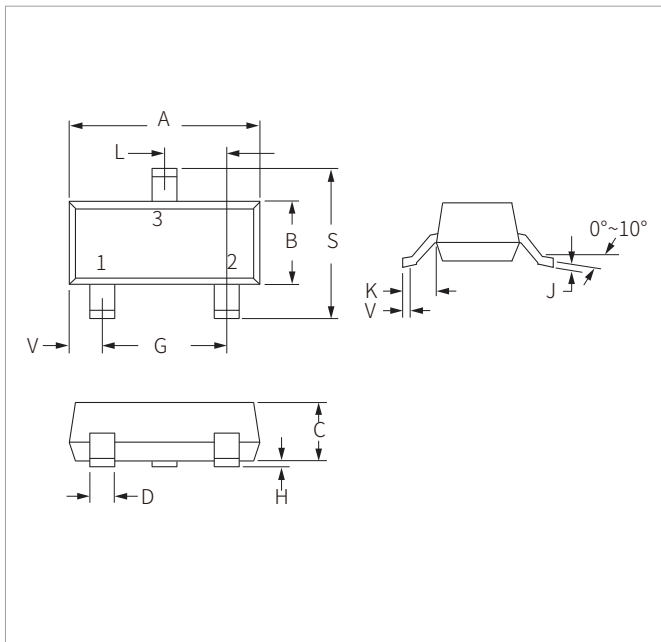
Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	V _{(BR)CBO}	BC846W	80			V
		BC847W	50			
		BC848W	30			
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	BC846W	65			V
		BC847W	45			
		BC848W	30			
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	BC846W	6			V
		BC847W	6			
		BC848W	5			
Collector Cut-off Current	I _{CBO}	V _{CB} = 30V, I _E = 0			15	nA
DC Current Gain	h _{FE}	BC846AW BC847AW,BC848AW	110		220	
		BC846BW BC847BW,BC848BW	200		450	
		BC847CW BC848CW	420		800	
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C = 10mA, I _B = 0.5mA			0.25	V
		I _C = 100mA, I _B = 5mA			0.60	
Base -Emitter Saturation Voltage	V _{BE(sat)}	I _C = 100mA, I _B = 5mA			1.10	
Transition Frequency	f _T	V _{CE} = 5V, I _C = 10mA, f = 100MHz	100			MHz
Collector Output Capacitance	C _{ob}	V _{CB} = 10V, f = 1MHz			4.5	pF
Noise Figure	NF	BC846AW BC847AW,BC848AW			10	dB
		BC846BW BC847BW,BC848BW			10	
		BC847CW BC848CW			4	
		V _{CE} = 5V, I _C = 0.2mA f = 1MHz, R _s = 2KΩ B _w = 200HZ				

TYPICAL CHARACTERISTICS



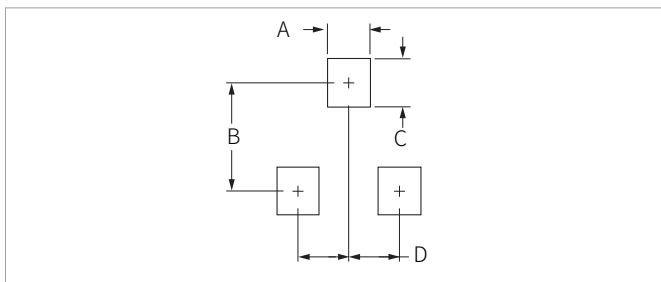


SOT-323 PACKAGE INFORMATION



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
BC846W-BC848W	SOT-323	3000PCS	7"

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By QR Code

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