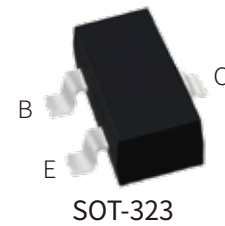


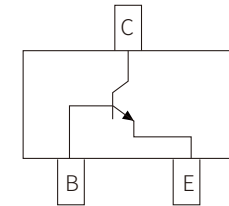
FEATURES

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

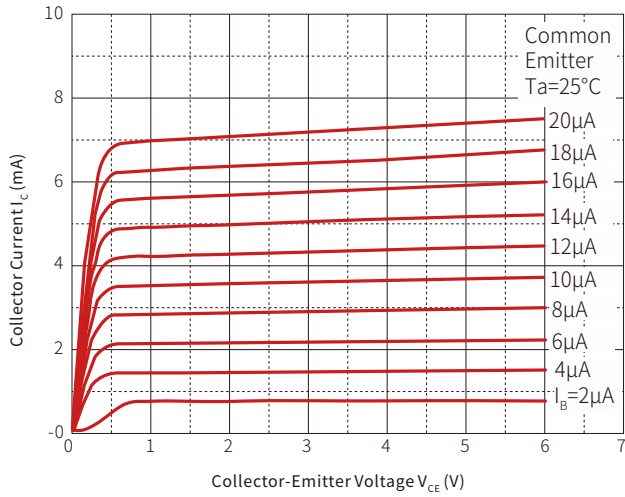
Parameter	Symbol	BC846W		BC847W			BC848W			Unit
Marking		BC846AW	BC846BW	BC847AW	BC847BW	BC847CW	BC848AW	BC848BW	BC848CW	
		1A	1B	1E	1F	1G	1J	1K	1L	
Collector-Base Voltage	V _{CBO}	80		50			30			V
Collector-Emitter Voltage	V _{CEO}	65		45			30			V
Emitter-Base Voltage	V _{EBO}	6		6			5			V
Collector 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)

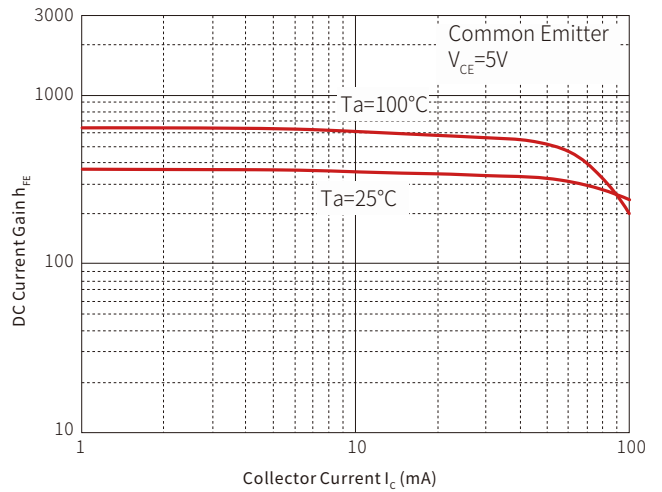
Parameter	Symbol	Test Conditions		Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	V _{(BR)CBO}	BC846W	I _C =10μA, I _E =0	80			V
		BC847W		50			
		BC848W		30			
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	BC846W	I _C =10mA, I _B =0	65			V
		BC847W		45			
		BC848W		30			
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	BC846W	I _E =1μA, I _C =0	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	V _{CE} = 5V, I _C =2mA	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	V _{CE} = 5V, I _C =0.2mA f=1MHz, R _s =2KΩ B _w =200HZ			10	dB
		BC846BW BC847BW,BC848BW				10	
		BC847CW BC848CW				4	

TYPICAL CHARACTERISTICS

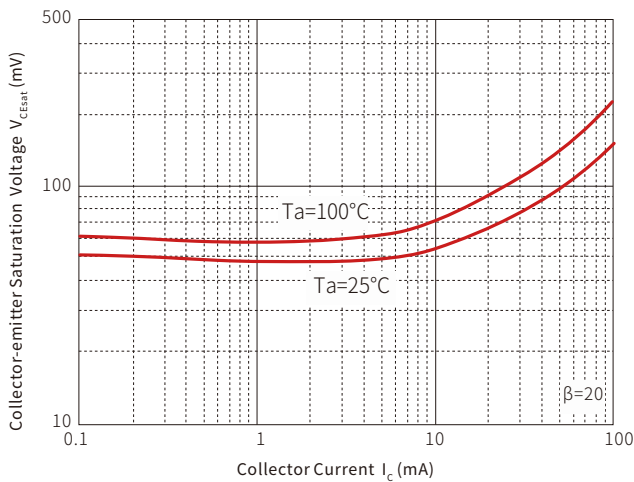
Static Characteristic



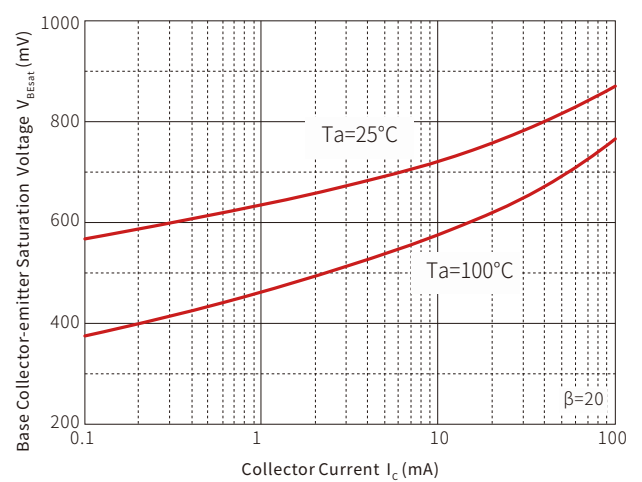
h_{FE} — I_C

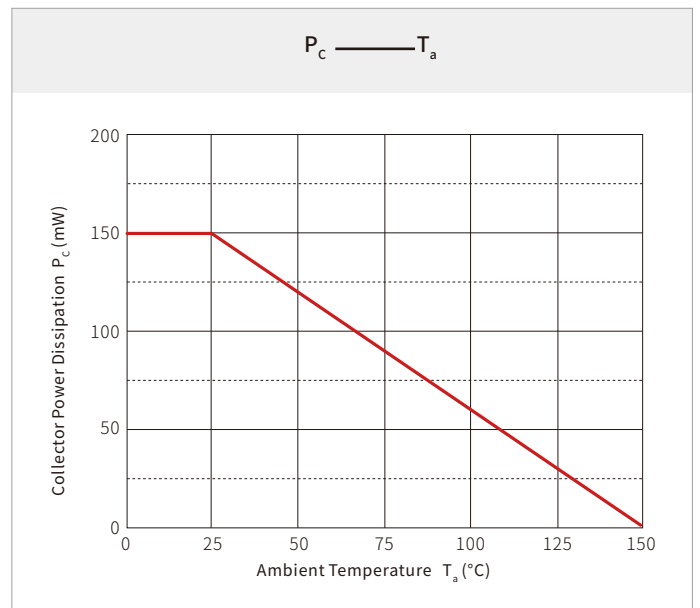
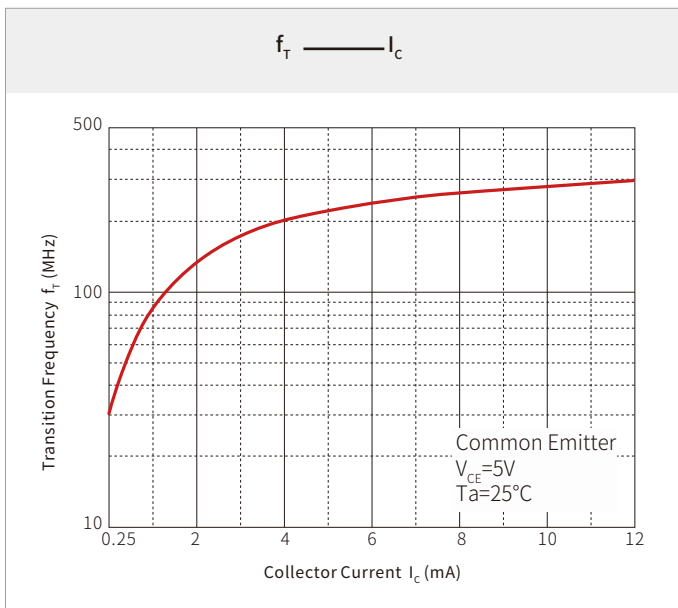
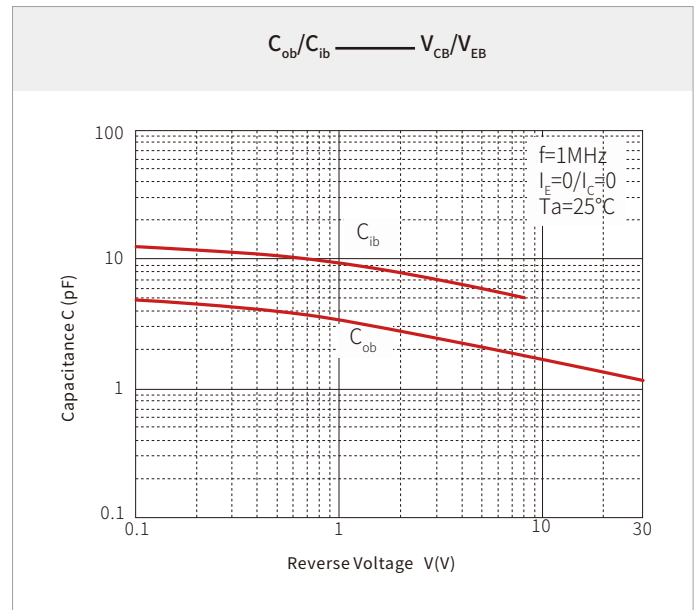
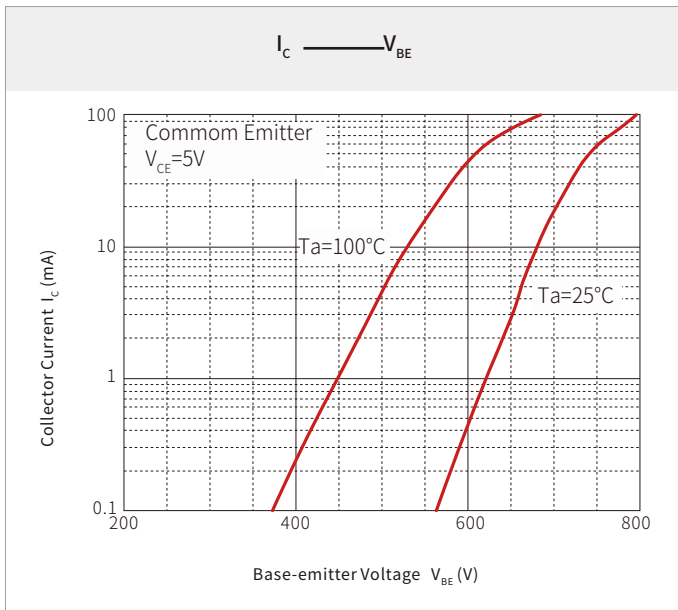


$V_{CE\text{ sat}}$ — I_C

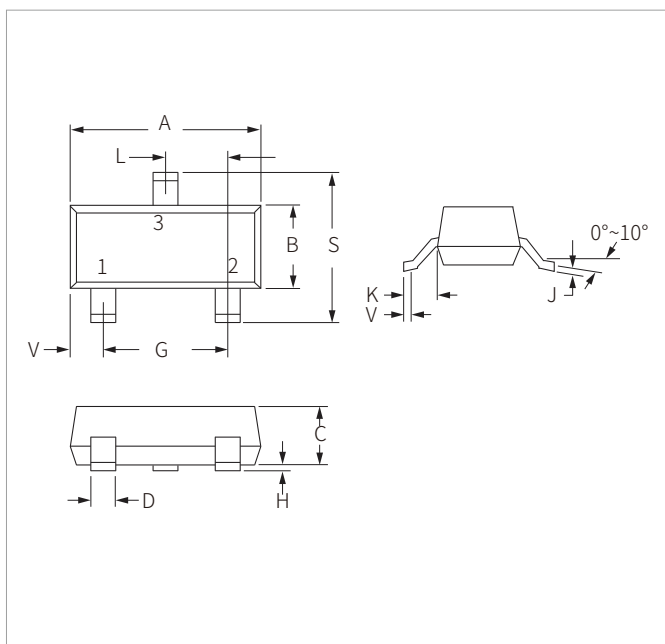


$V_{BE\text{ sat}}$ — I_C



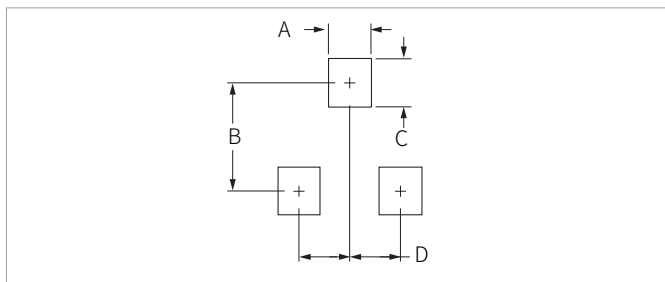


SOT-323 PACKAGE INFORMATION



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
BC846W-BC848W	SOT-323	3000PCS	7"

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By QR Code

Website



Wechat

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