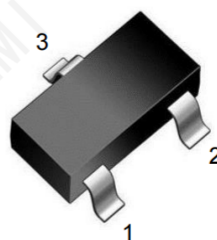
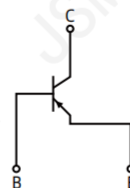


Features

- ◆ Ideally suited for automatic insertion
- ◆ Epitaxial planar die construction
- ◆ Complementary to BC817W



SOT-323 top view



Equivalent Circuit

1.BASE
2.EMITTER
3.COLLECTOR

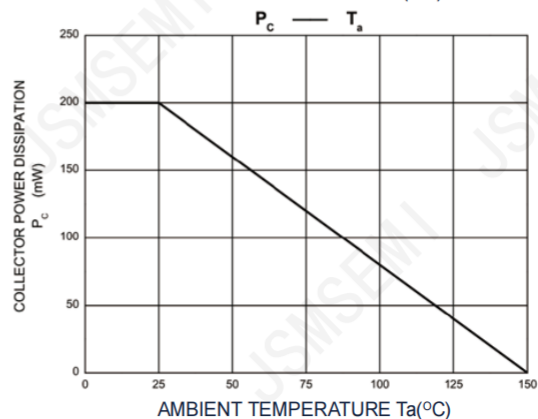
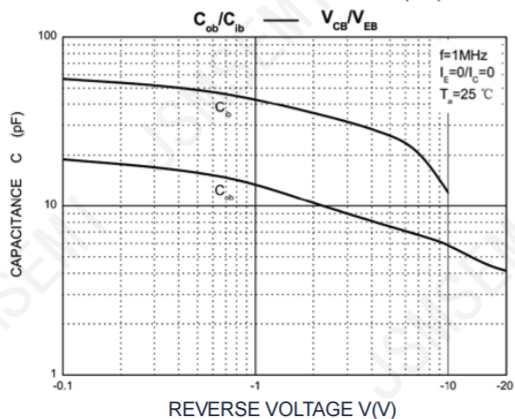
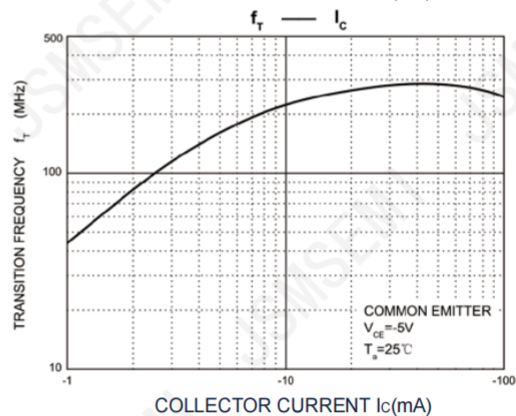
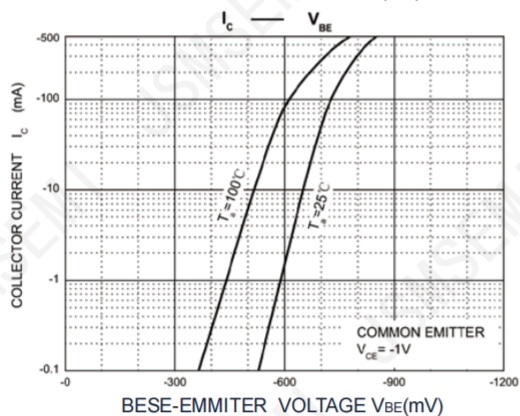
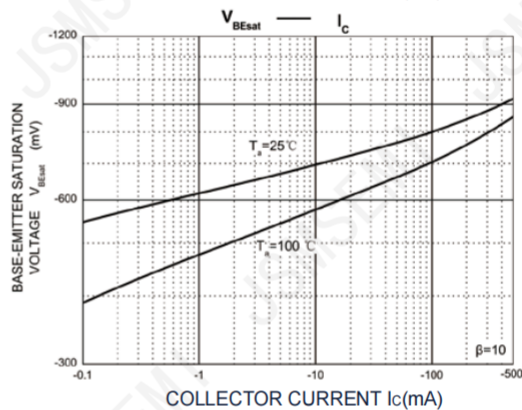
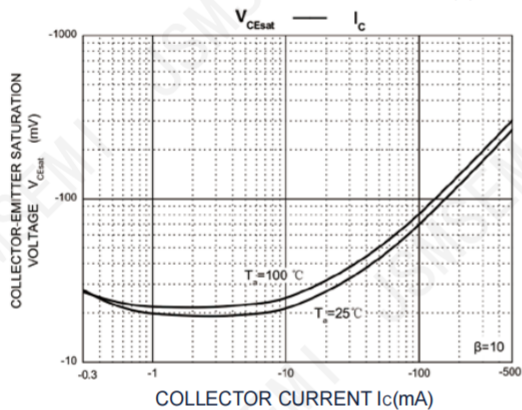
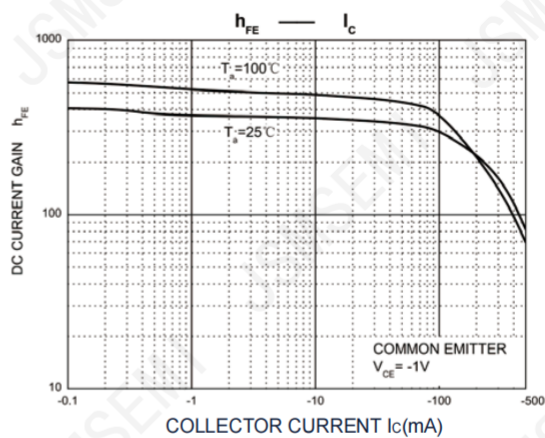
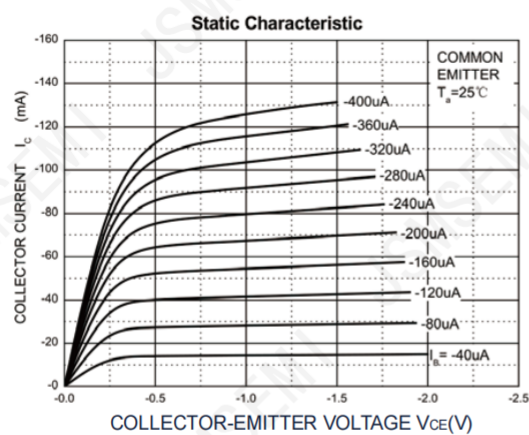
Absolute Maximum Ratings(TA=25℃)

Symbol	Parameter	Value	Unit
V _{CBO}	Collector-Base Voltage	-50	V
V _{CEO}	Collector-Emitter Voltage	-45	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current	-0.5	A
P _C	Collector Power Dissipation	0.2	W
R _{θJA}	Thermal Resistance From Junction To Ambient	625	°C/W
T _J ,T _{stg}	Operation Junction And Storage Temperature Range	-55 ~ +150	°C

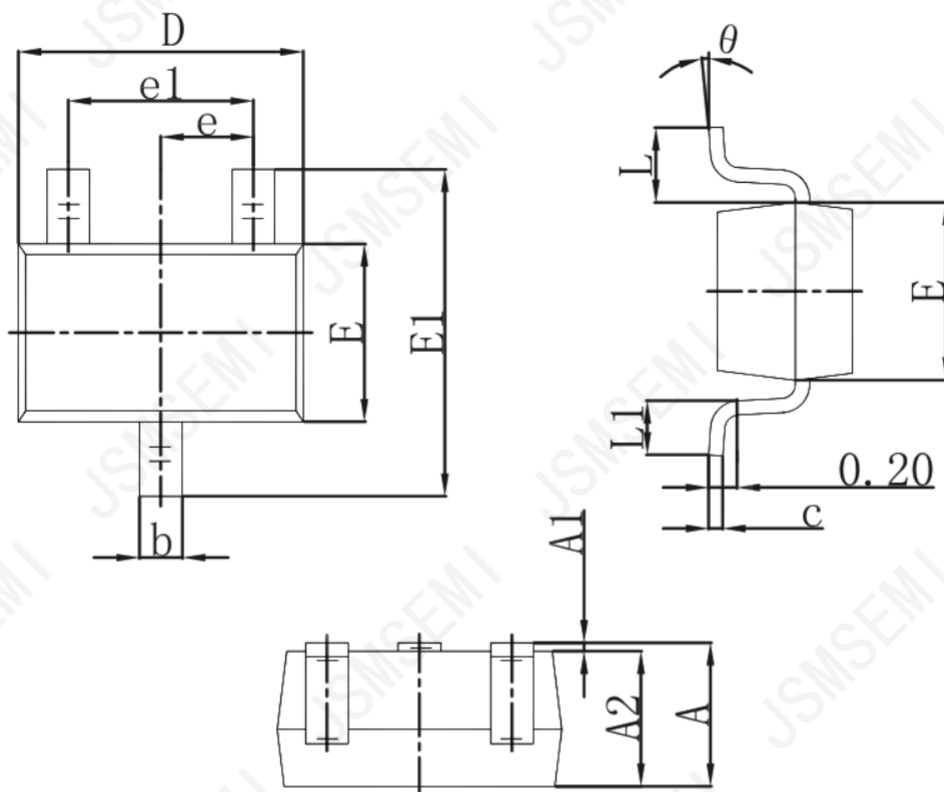
Electrical Characteristics (TA=25℃ unless otherwise specified)

Symbol	Parameter	Test conditions	Min	Max	Unit
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =-10μA, I _E =0	-50		V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-10mA, I _B =0	-45		V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =-1μA, I _C =0	-5		V
I _{CBO}	Collector cut-off current	V _{CB} =-20V, I _E =0		-0.1	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V, I _C =0		-0.1	μA
h _{FE(1)}	DC current gain	V _{CE} =-1V, I _C =-100mA	100	600	
h _{FE(2)}		V _{CE} =-1V, I _C =-500mA	40		
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =-500mA, I _B =-50mA		-0.7	V
V _{BE(on)}	Base-emitter voltage	V _{CE} =-1V, I _C =-500mA		-1.2	V
f _T	Transition frequency	V _{CE} =-5V, I _C =-10mA, f=100MHz	80		MHz
C _{ob}	Collector output capacitance	V _{CB} =-10V, f=1MHz		10	pF

Typical Characteristics



SOT-323 Package Outline Dimensions



Symbol	Dimensions in Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	1.350	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Revision History

Rev.	Change	Date
V1.0	Initial version	2/23/2024

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