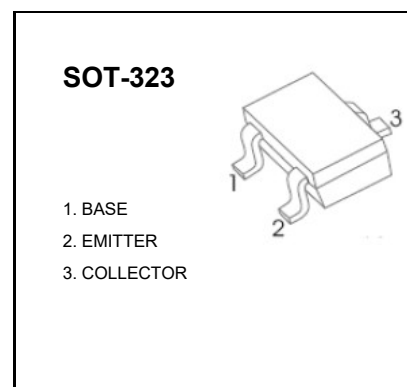


## TRANSISTOR(PNP)

### FEATURES

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



### MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	-50	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-45	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current -Continuous	-0.5	A
P <sub>C</sub>	Collector Power Dissipation	0.2	W
R <sub>θJA</sub>	Thermal Resistance from Junction to Ambient	6	°C/W
T <sub>J</sub> , T <sub>stg</sub>	Storage Temperature	-55~+150	°C

### ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless otherwise specified)

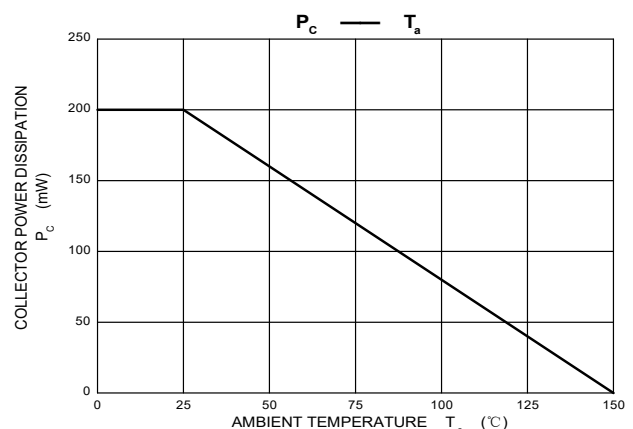
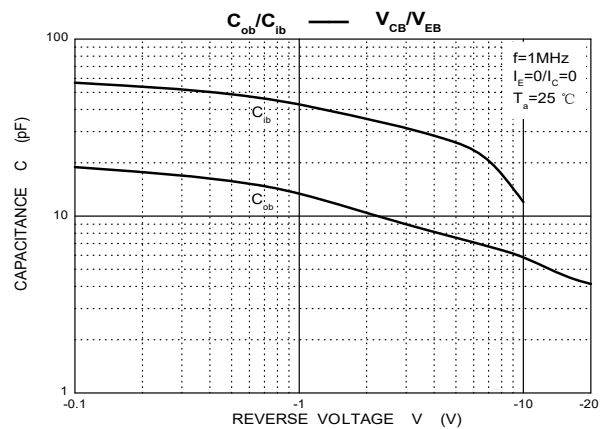
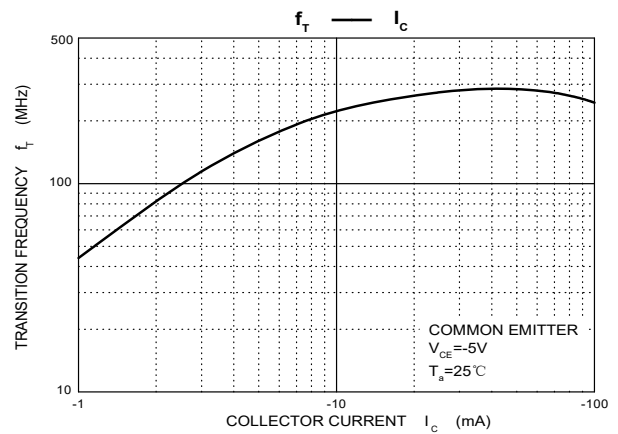
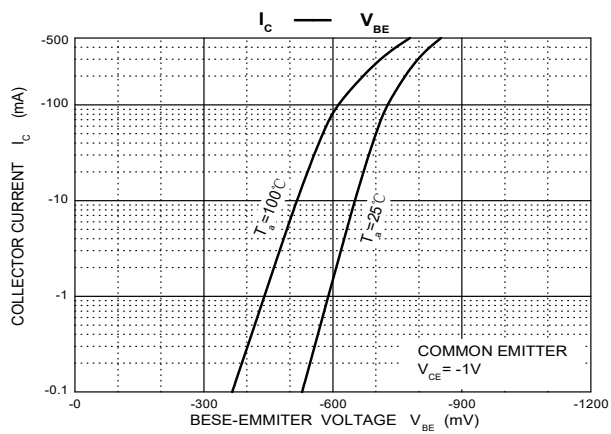
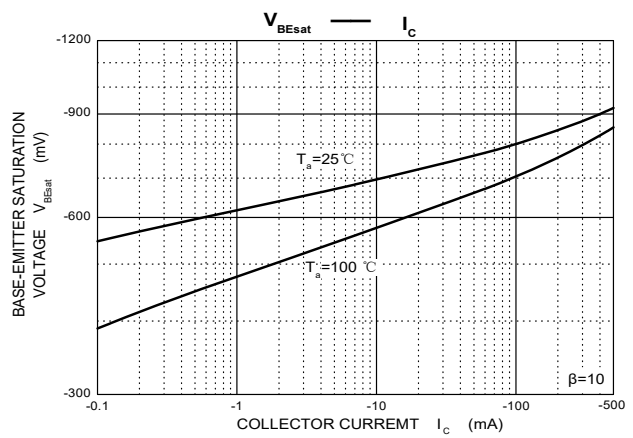
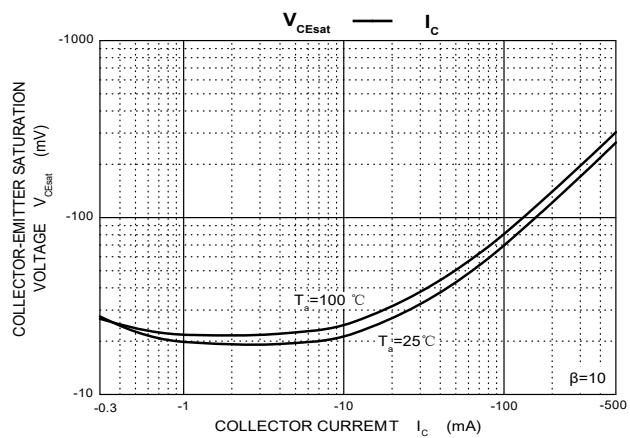
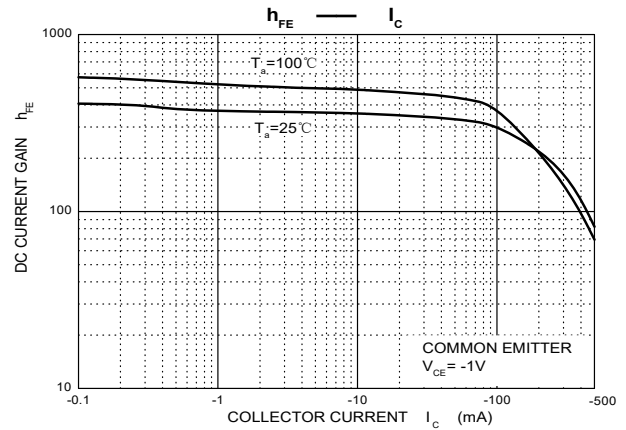
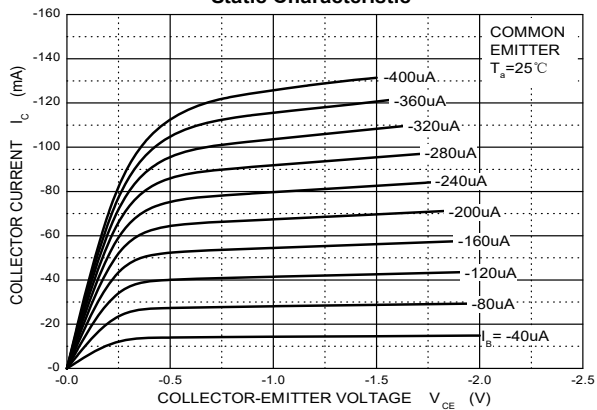
Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V <sub>CBO</sub>	I <sub>C</sub> =-10μA, I <sub>E</sub> =0	-50		V
Collector-emitter breakdown voltage	V <sub>CEO</sub>	I <sub>C</sub> =-10mA, I <sub>B</sub> =0	-45		V
Emitter-base breakdown voltage	V <sub>EBO</sub>	I <sub>E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

### CLASSIFICATION of h<sub>FE(1)</sub>

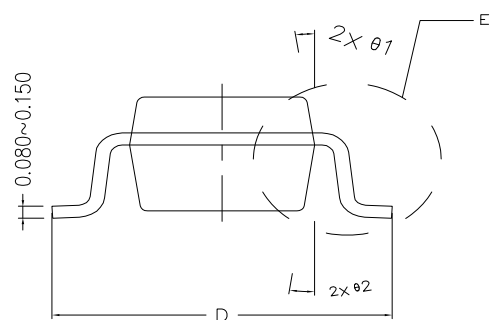
Rank	BC807-16W	BC807-25W	BC807-40W
Range	100-250	160-400	250-600
Marking	: 5 A	: 5 B	: 5 C

## Typical Characteristics

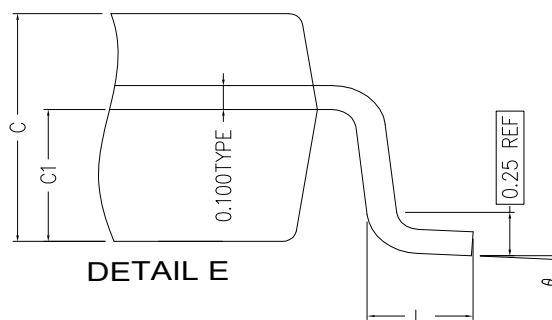
Static Characteristic



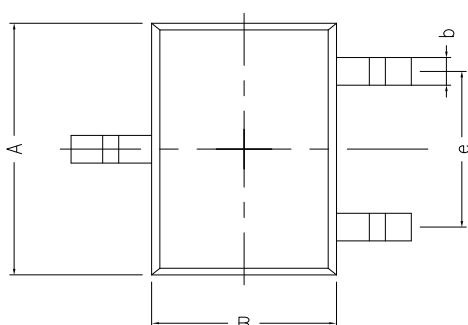
## SOT-323 Package Outline Dimensions



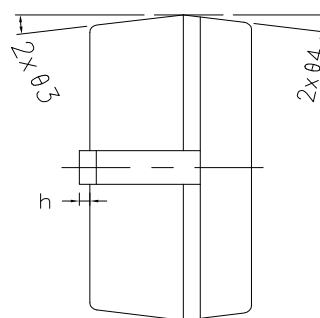
SIDE VIEW



DETAIL E



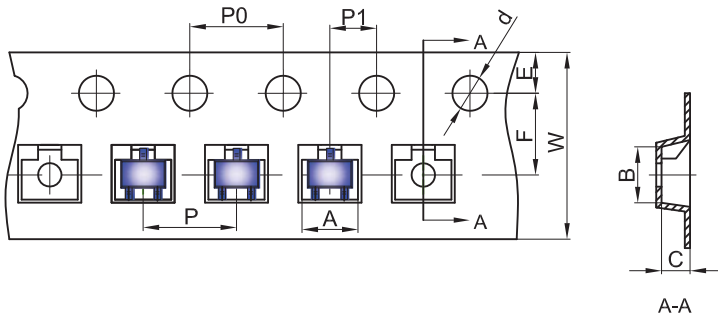
TOP VIEW



SIDE VIEW

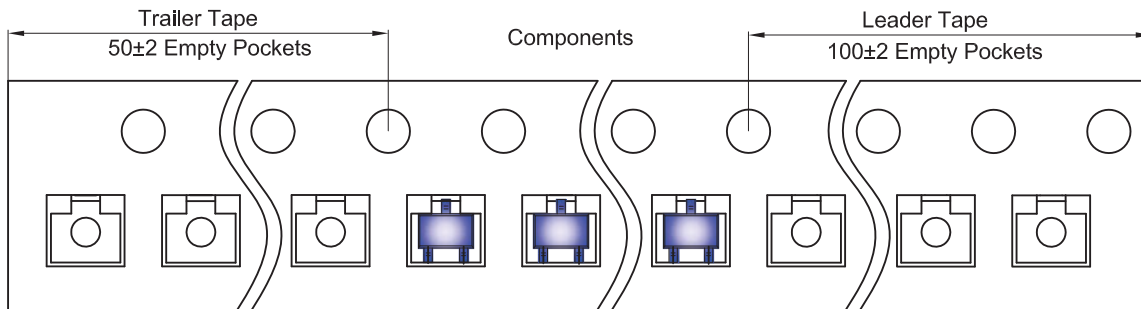
COMMON DIMENSIONS (UNITS OF MEASURE IS mm)			
	MIN	NORMAL	MAX
A	2.000	2.100	2.200
B	1.150	1.250	1.350
C	0.900	0.950	1.000
C1	0.500	0.550	0.600
D	2.100	2.300	2.500
L	0.220	0.360	0.500
b	0.200	0.250	0.400
h	0.020	0.050	0.100
e	1.300TYPE		
θ <sub>1</sub>	8° TYPE		
θ <sub>2</sub>	8° TYPE		
θ <sub>3</sub>	8° TYPE		
θ <sub>4</sub>	8° TYPE		
θ	0~8° TYPE		

## SOT-323 Embossed Carrier Tape

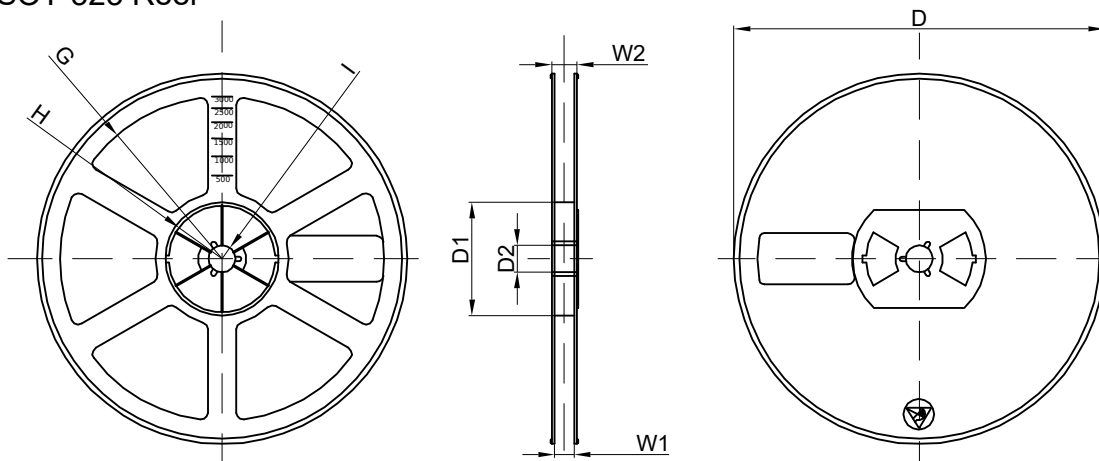


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-323	2.25	2.55	1.19	Ø1.55	1.75	3.50	4.00	4.00	2.00	8.00

## SOT-323 Tape Leader and Trailer



## SOT-323 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	192x182x182	180,000 pcs	400x385x205	