

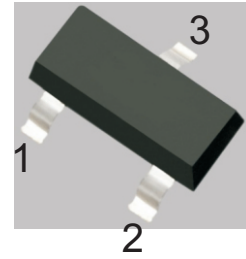
**BC807**

**PNP TRANSISTOR**

**FEATURES**

- Ideally suited for automatic insertion
- Epitaxial planar die construction
- Complementary NPN type available(BC817)

**SOT-23**



1.BASE  
2.EMITTER  
3.COLLECTOR

**MAXIMUM RATINGS (Ta=25°C unless otherwise noted)**

Parameter	Symbol	Value	Unit
Collector–Base Voltage	$V_{CB0}$	-50	V
Collector–Emitter Voltage	$V_{CE0}$	-45	V
Emitter–Base Voltage	$V_{EB0}$	-5	V
Collector Current — Continuous	$I_c$	-0.5	A
Collector Power Dissipation	$P_c$	0.3	W
Junction Temperature	$T_J$	150	°C
Storage Temperature	$T_{stg}$	-55~+150	°C

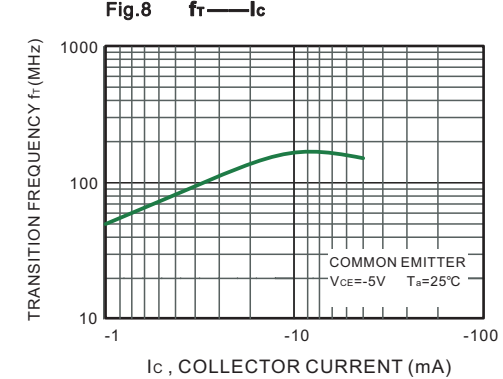
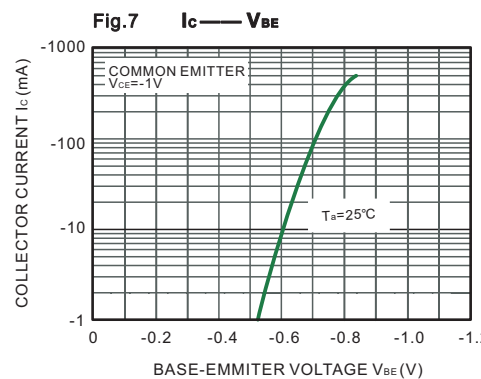
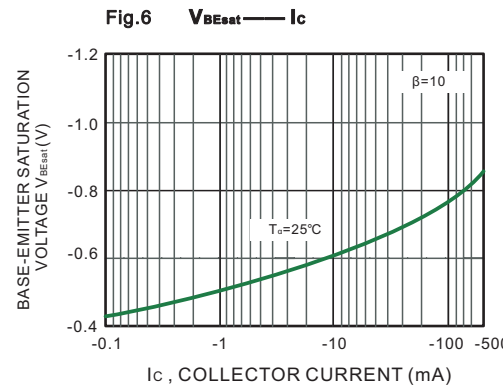
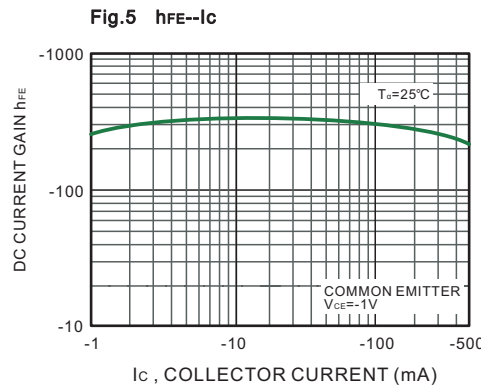
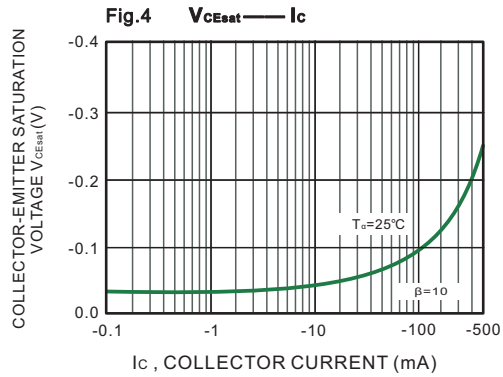
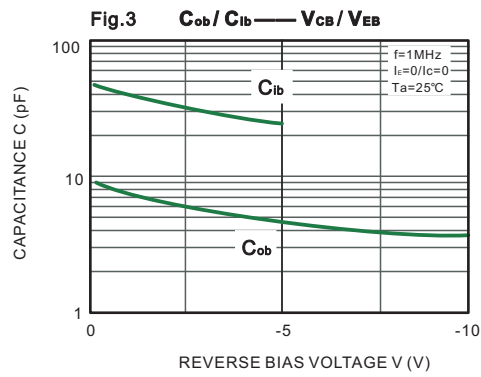
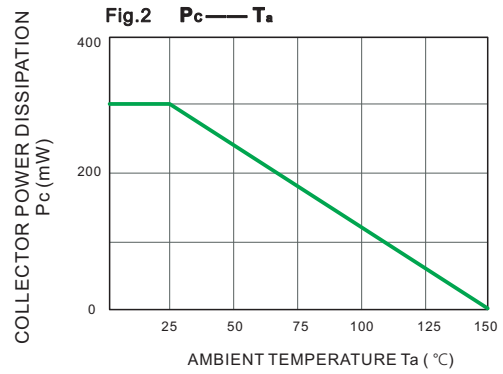
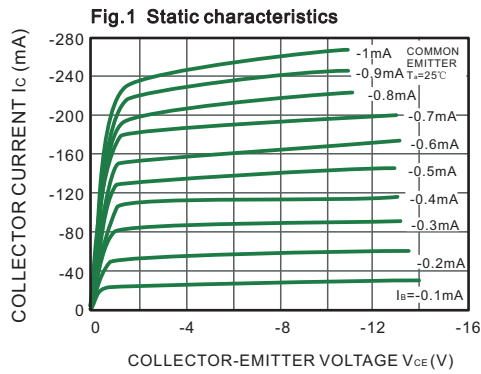
**ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted.)**

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{CB0}$	$I_c = -10\mu A, I_E = 0$	-50		V
Collector-emitter breakdown voltage	$V_{CE0}$	$I_c = -10mA, I_B = 0$	-45		V
Emitter-base breakdown voltage	$V_{EB0}$	$I_E = -1\mu A, I_c = 0$	-5		V
Collector cut-off current	$I_{CB0}$	$V_{CB} = -45V, I_E = 0$		-0.1	$\mu A$
Collector cut-off current	$I_{CE0}$	$V_{CE} = -40V, I_B = 0$		-0.2	$\mu A$
Emitter cut-off current	$I_{EB0}$	$V_{EB} = -4V, I_c = 0$		-0.1	$\mu A$
DC current gain	$h_{FE(1)}$	$V_{CE} = -1V, I_c = -100mA$	100	600	
	$h_{FE(2)}$	$V_{CE} = -1V, I_c = -500mA$	40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = -500mA, I_B = -50mA$		-0.7	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_c = -500mA, I_B = -50mA$		-1.2	V
Transition frequency	$f_t$	$V_{CE} = -5V, I_c = -10mA, f = 100MHz$	100		MHz

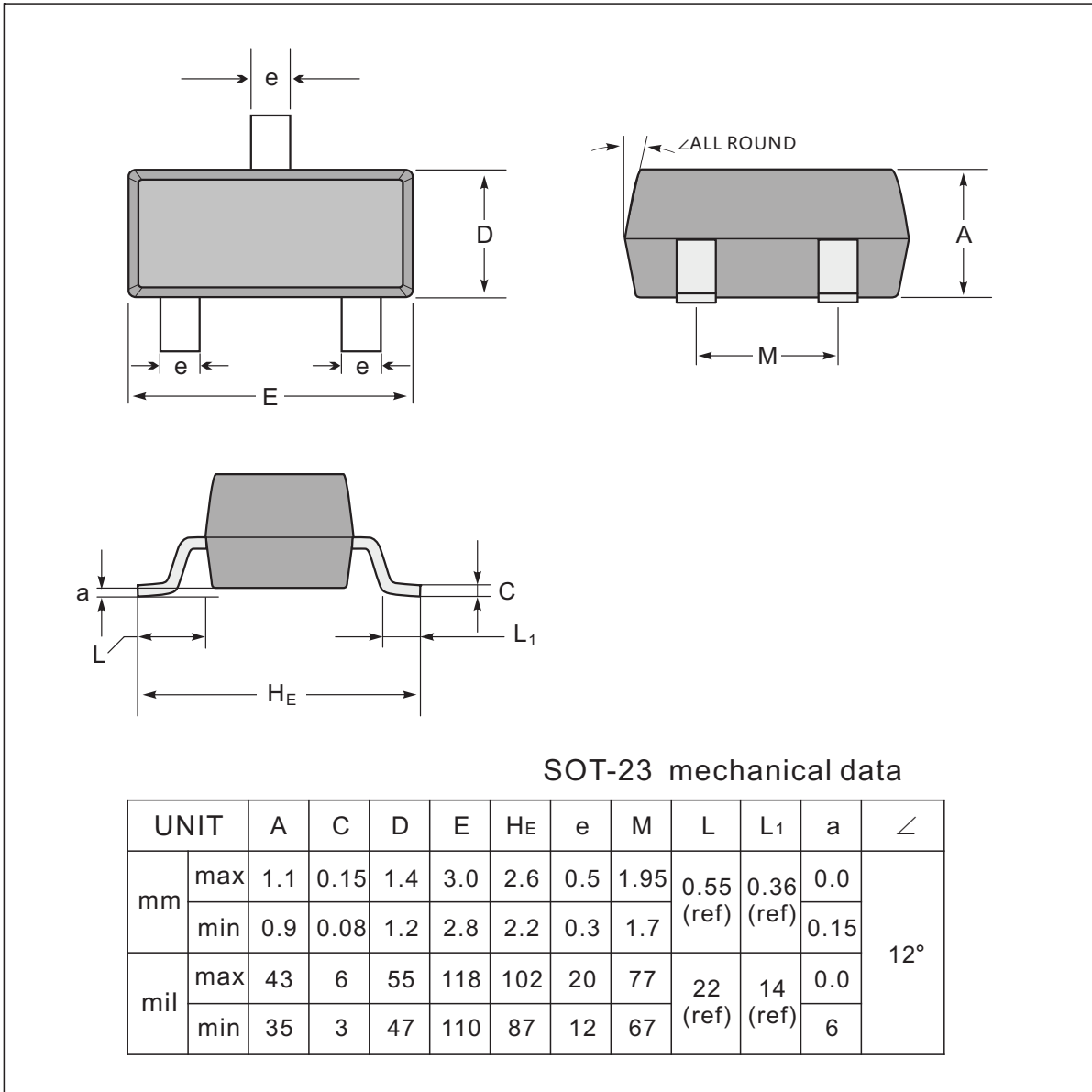
**CLASSIFICATION OF  $h_{FE}$**

RANK	BC807-16	BC807-25	BC807-40
RANGE	100-250	160-400	250-600

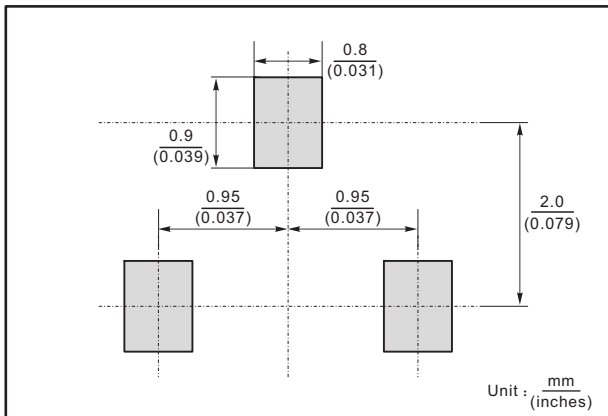
**TYPICAL CHARACTERISTICS**



**SOT-23 Package Outline Dimensions**



**The recommended mounting pad size**

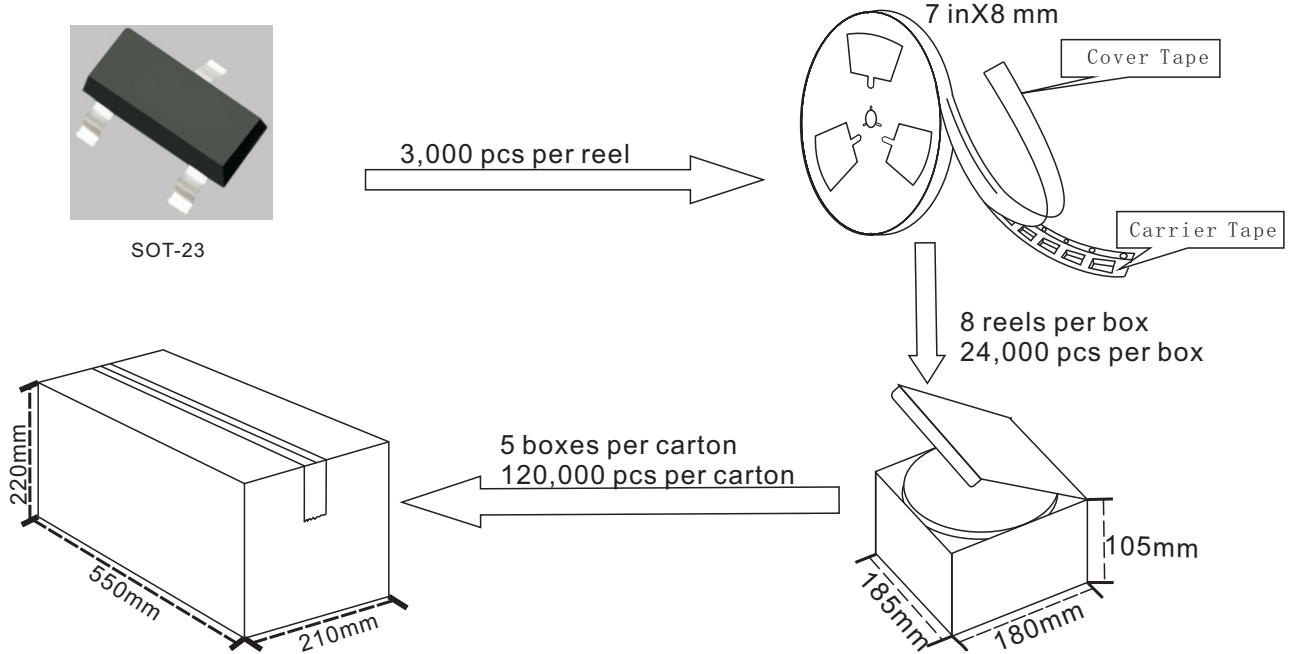


**Marking**

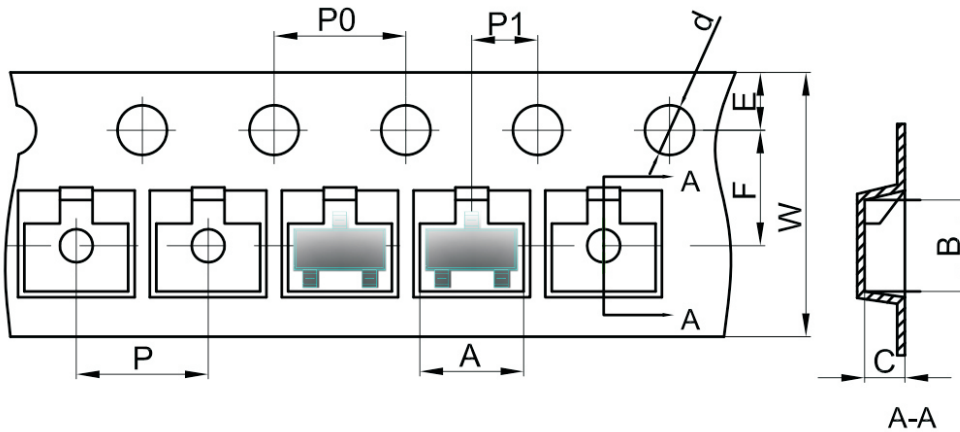
Type number	Marking code
BC807-16	5A
BC807-25	5B
BC807-40	5C

## SOT-23 Packing

1. The method of packaging and dimension are shown as below figure. (Dimension in mm)



### SOT-23 Embossed Carrier Tape



Dimensions are in millimeter

Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

### SOT-23 Tape Leader and Trailer

