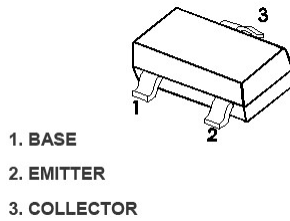


**SOT-23**
**BC807 TRANSISTOR(PNP)  
SOT-23 Plastic-Encapsulate Transistors**

**Features**

- Complementary to BC817
- Power Dissipation of 300mW
- High Stability and High Reliability

**Mechanical Data**

- SOT-23 Small Outline Plastic Package
- Epoxy UL: 94V-0
- Mounting Position: Any

**Maximum Ratings & Thermal Characteristics** (Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Collector-Base Voltage	$V_{CBO}$	-50	V
Collector-Emitter Voltage	$V_{CEO}$	-45	V
Emitter -Base Voltage	$V_{EBO}$	-5	V
Collector Current-Continuous	$I_C$	-500	mA
Collector Power Dissipation	$P_C$	300	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{stg}$	-55-+150	°C
Thermal resistance from junction to ambient	$R_{\theta JA}$	417	°C/W

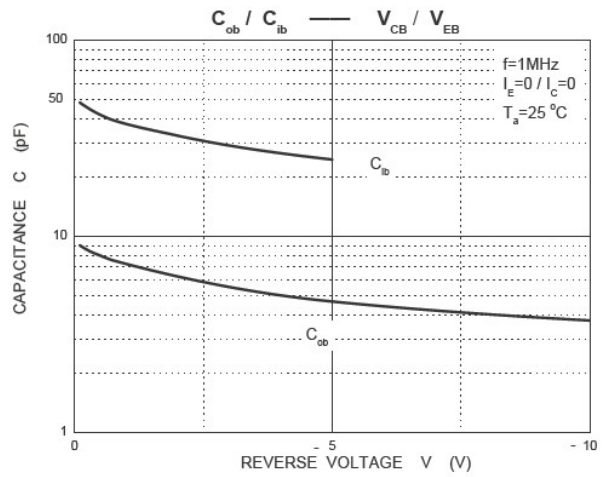
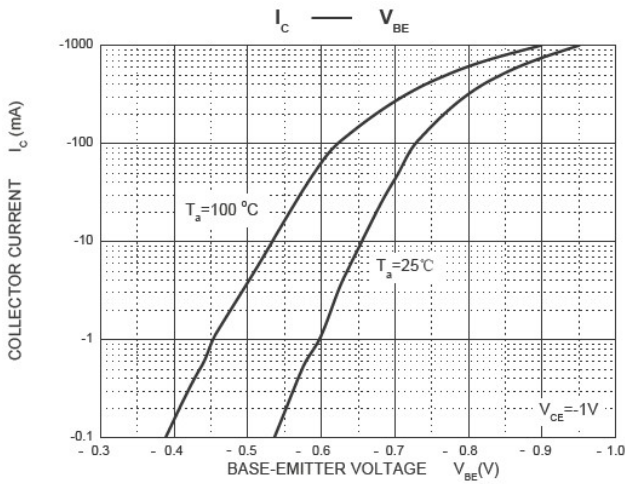
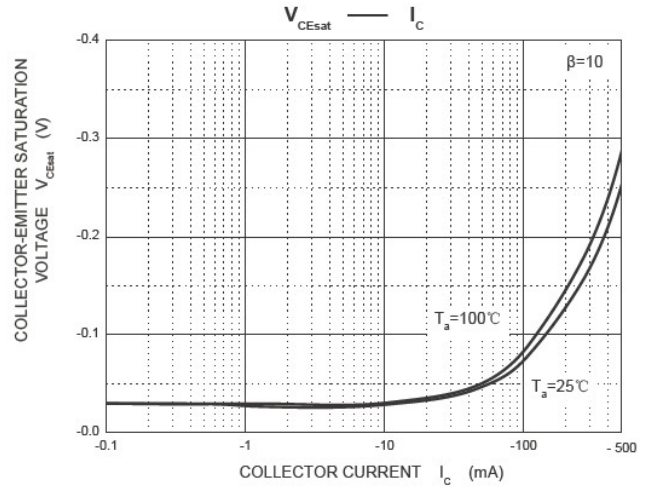
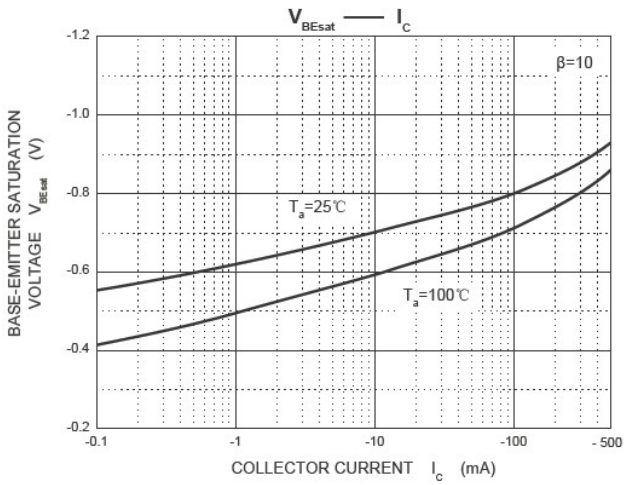
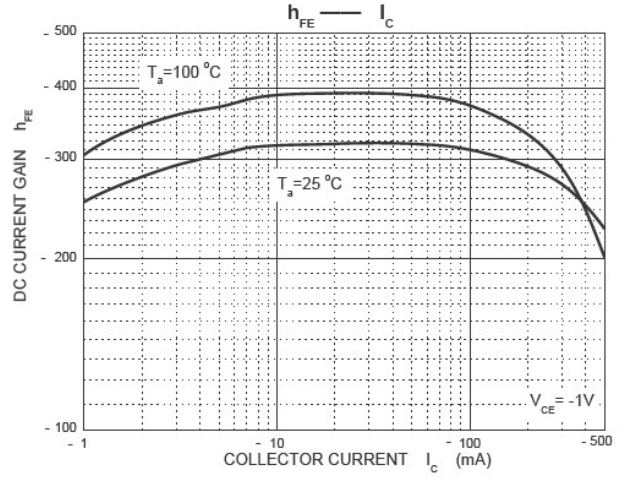
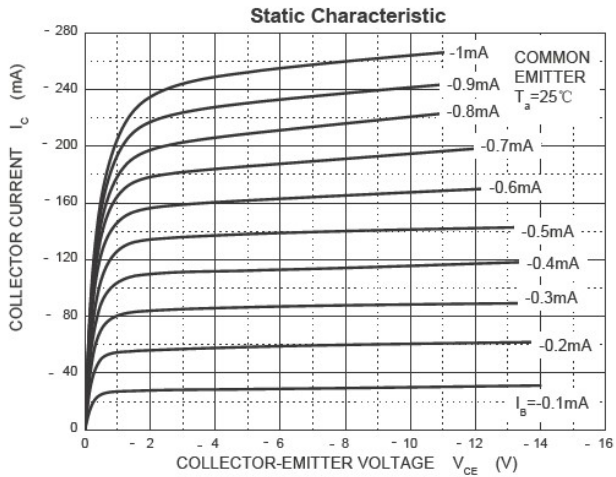
**Electrical Characteristics** (Ratings at 25°C ambient temperature unless otherwise specified).

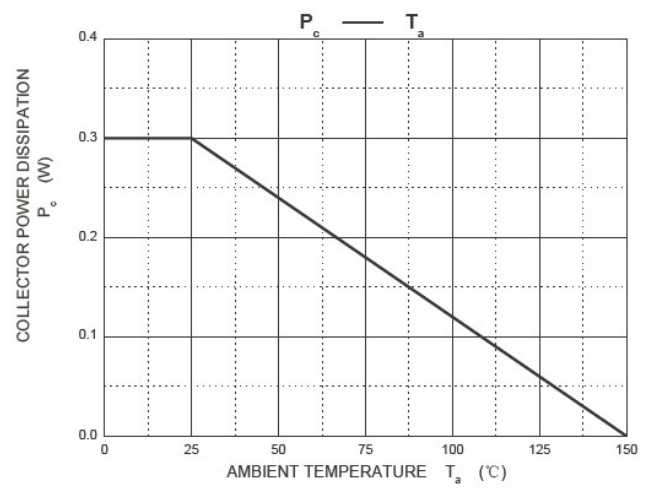
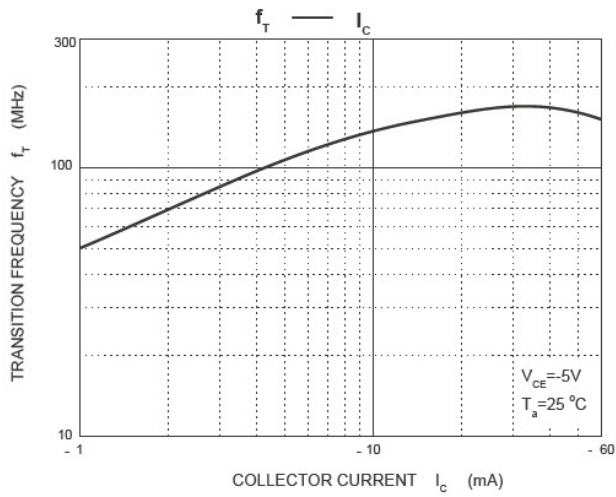
Parameter	Symbols	Test Condition	Limits		Unit
			Min	Max	
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	-50		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	-45		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -1\mu A, I_C = 0$	-5		V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -45V, I_E = 0$		-100	nA
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -4V, I_C = 0$		-100	nA
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	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$		-0.70	V
Base -emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500mA, I_B = -50mA$		-1.20	V
Transition frequency	$f_T$	$V_{CE} = -5V, I_C = -10mA, f = 100MHz$	100		MHz

**CLASSIFICATION OF  $h_{FE(1)}$** 

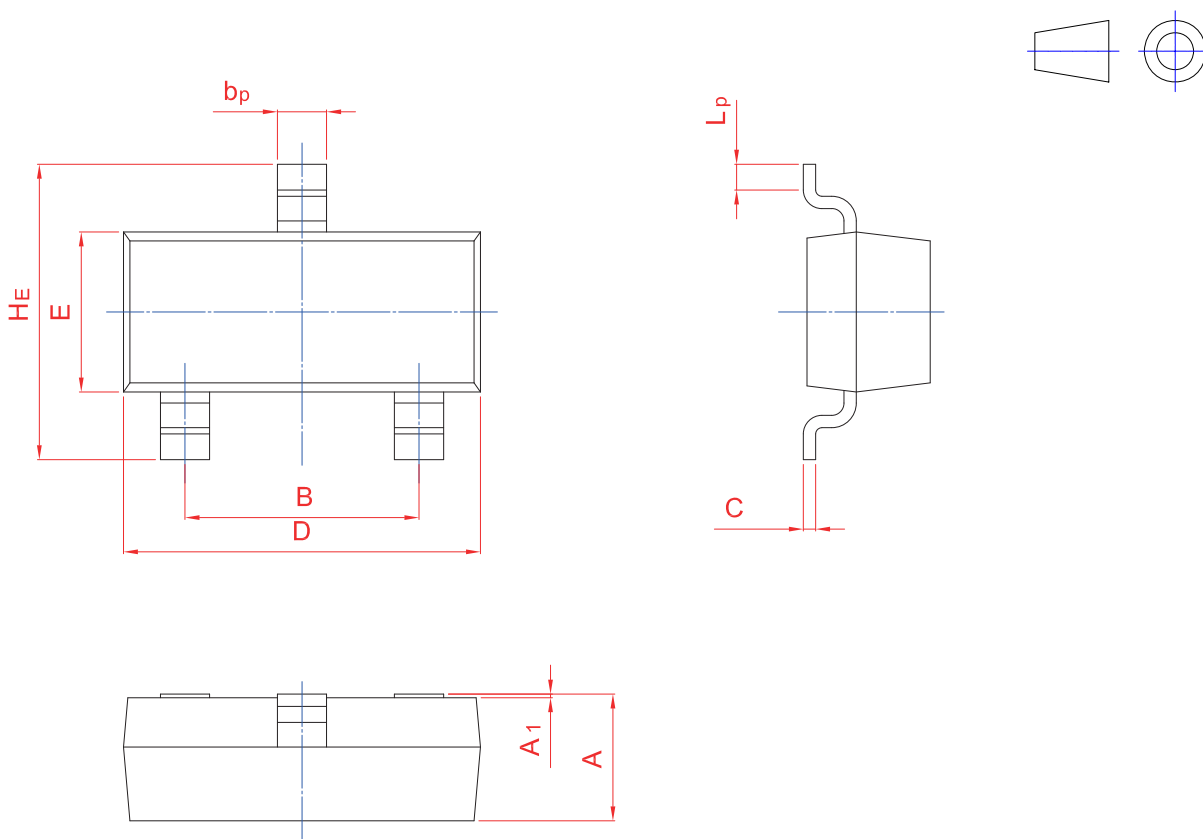
RANK	BC807-16	BC807-25	BC807-40
RANGE	100-250	160-400	250-600
Marking	5A	5B	5C

### Typical characteristics





### SOT-23 PACKAGE OUTLINE Plastic surface mounted package



UNIT	A	B	b <sub>p</sub>	C	D	E	H <sub>E</sub>	A <sub>1</sub>	L <sub>p</sub>
mm	1.40 0.89	2.04 1.78	0.51 0.30	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20