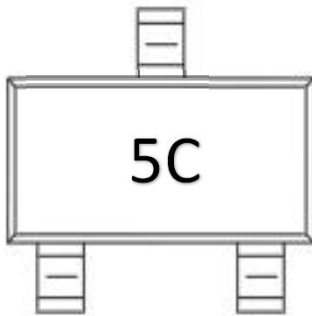


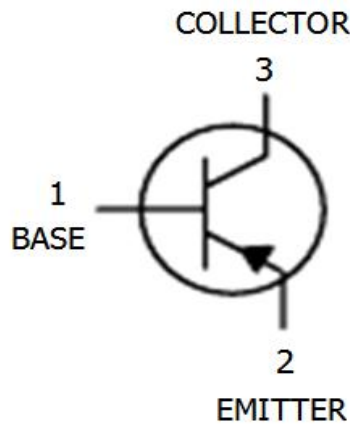
## SOT-23 Plastic-Encapsulate MOSFETS

### BC807 TRANSISTOR (PNP)

#### MARKING:

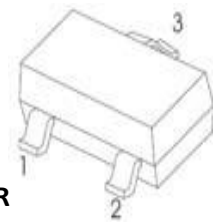


#### Equivalent Circuit:



#### SOT-23

1.BASE  
2.EMITTER  
3.COLLECTOR



#### FEATURES:

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

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

Parameter	Symbol	Value	Unit
Collector-Base Voltage	VCBO	-50	V
Collector-Emitter Voltage	VCEO	-45	V
Emitter-Base Voltage	VEBO	-5	V
Collector Current -Continuous	IC	-500	mA
Collector Current -Pulsed	ICM	-200	mA
Collector Power Dissipation	PC	300	mW
Thermal Resistance From Junction To Ambient	RθJA	417	°C/W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55~+150	°C

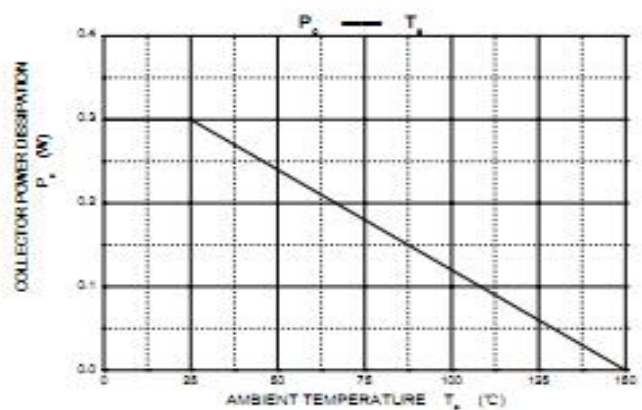
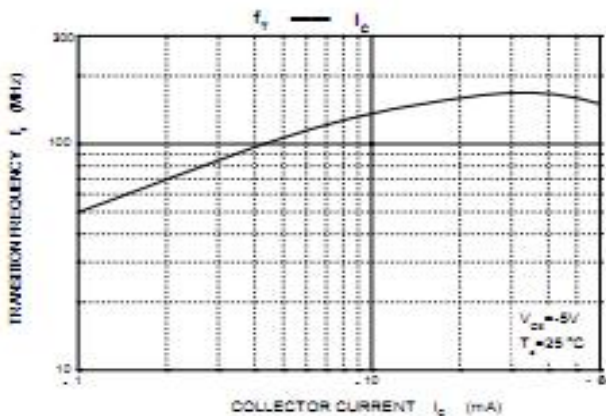
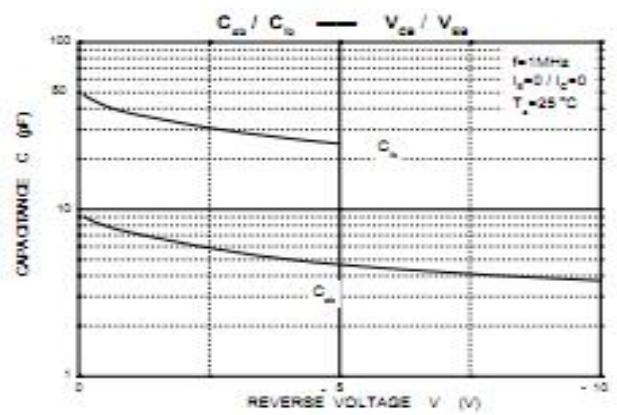
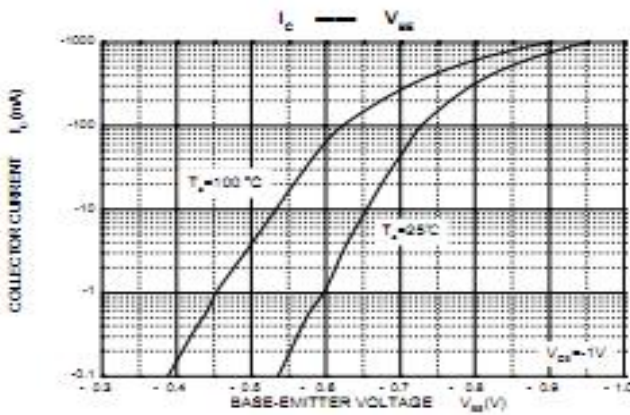
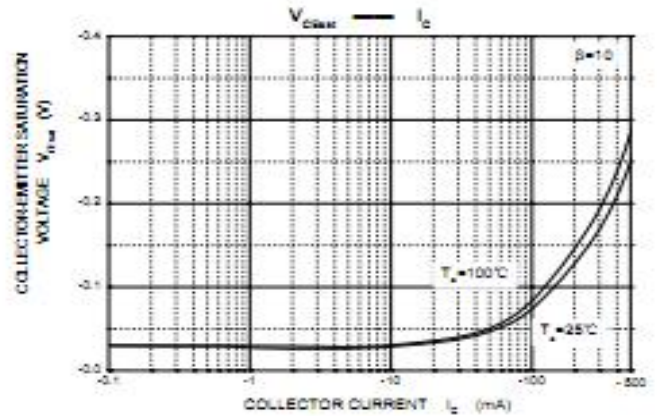
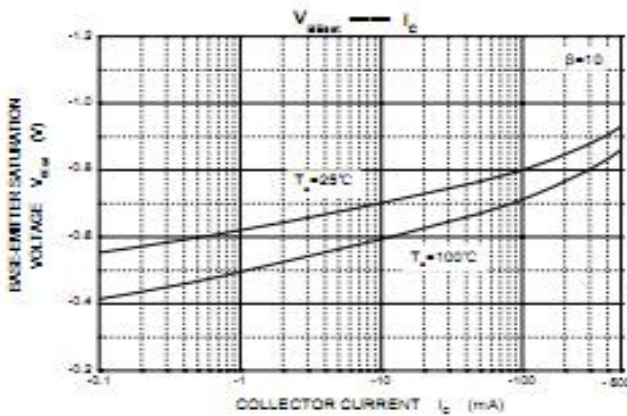
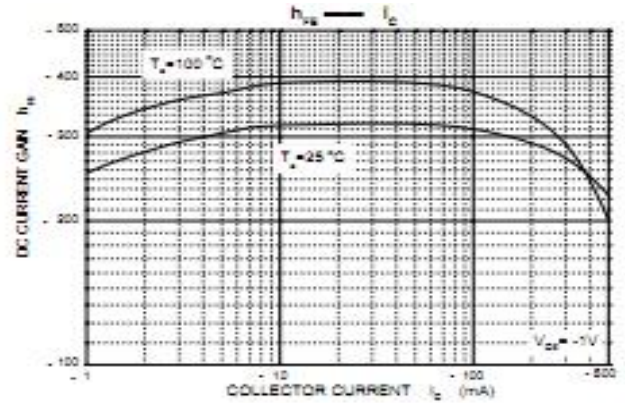
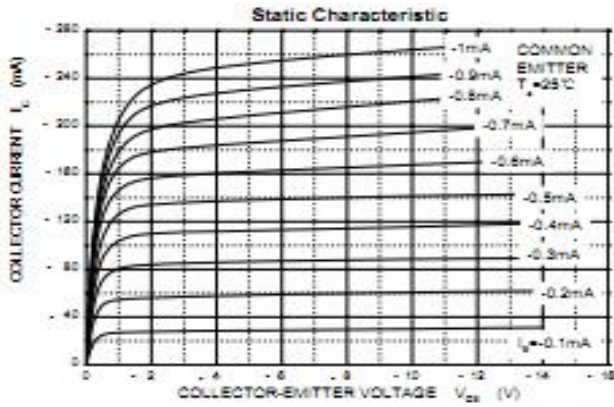
**ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)**

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	IC= -10μA, IE=0	-50			V
Collector-emitter breakdown voltage	V(BR)CEO	IC= -10mA, IB=0	-45			V
Emitter-base breakdown voltage	V(BR)EBO	IE=-10μA, IC=0	-5			V
Collector cut-off current	ICBO	VCB= -45 V , IE=0			-0.1	μA
Collector cut-off current	ICEO	VCB= -40V , IE=0			-0.8	μA
Emitter cut-off current	IEBO	VEB= -4V , IC=0			-0.1	μA
DC current gain	hFE	VCE= -1V, IC= -100mA	100		600	
	hFE	VCE= -1V, IC= -500mA	40			
Collector-emitter saturation voltage	VCE(sat)	IC= -500mA, IB= -5mA			-0.65	V
Base-emitter saturation voltage	VBE(sat)	IC= -500 mA, IB= -5mA			-1.2	V
Transition frequency	fT	VCE= -5V, IC= -10mA f=100MHz	100			MHz
Collector output capacitance	Cob	VCB=10V, IE=0, f=1MHz		10		PF

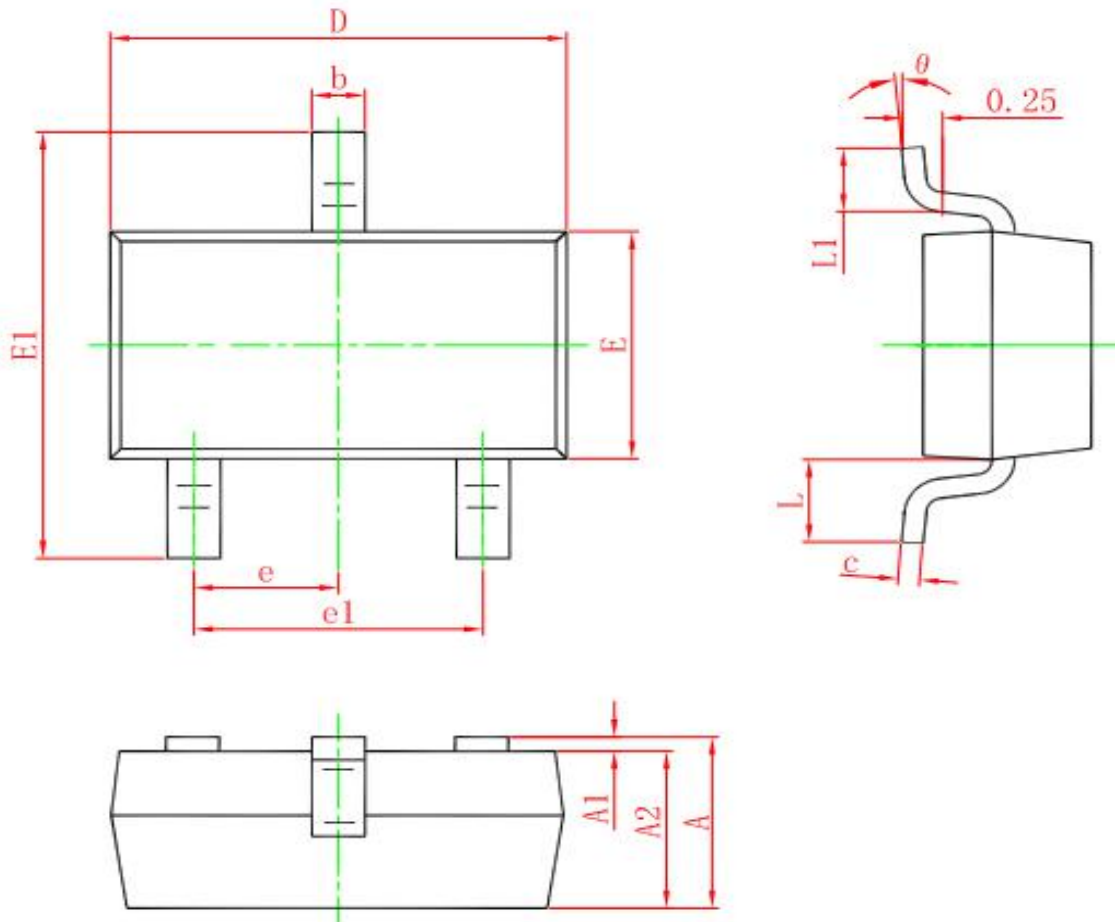
**CLASSIFICATION OF hFE**

<b>Rank</b>	<b>BC807-16</b>	<b>BC807-25</b>	<b>BC807-40</b>
<b>Range</b>	<b>100-250</b>	<b>160-400</b>	<b>250-600</b>
<b>Marking</b>	<b>5A</b>	<b>5B</b>	<b>5C</b>

## TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS



### SOT-23 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP.		0.037 TYP.	
e1	1.800	2.000	0.071	0.079
L	0.550 REF.		0.022 REF.	
L1	0.300	0.500	0.012	0.020
$\theta$	0°	8°	0°	8°