

<h3>PNP General Purpose Transistor</h3>		
<p>FEATURES</p> <ul style="list-style-type: none"> • Ideally suited for automatic insertion • Epitaxial planar die construction • Complementary to BC817W <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case: SOT-323 Plastic • Case material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl) • Lead Free in RoHS 2002/95/EC Compliant 		

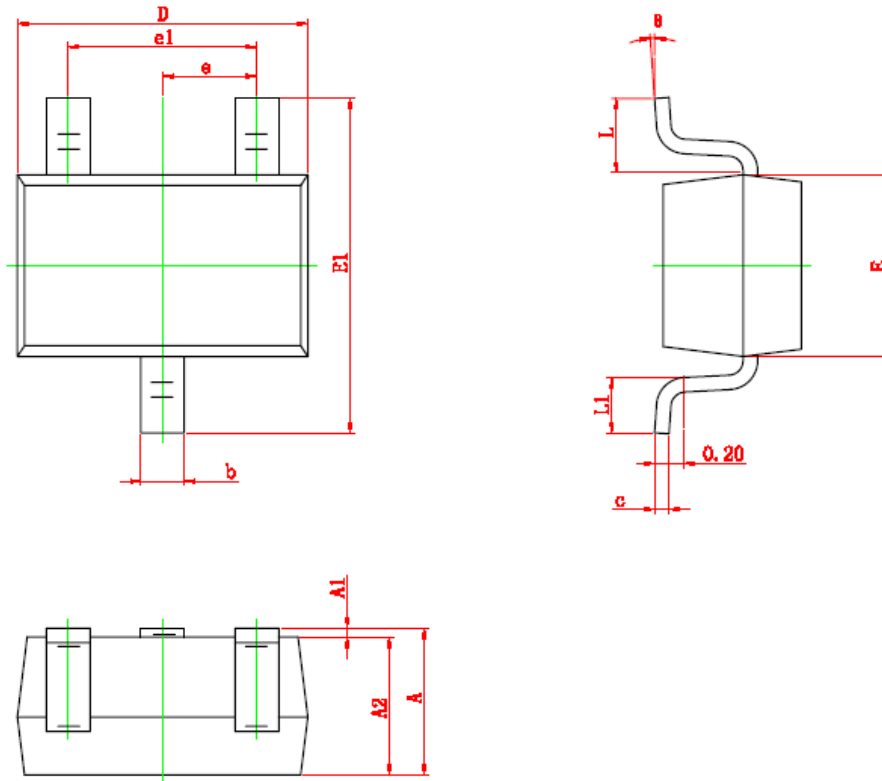
Maximum Ratings @ T_A = 25°C

Characteristic	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 Range	T _{STG}	-55~+150	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Collector-base breakdown voltage	I _C =-10μA, I _E =0	V _{CBO}	-50			V
Collector-emitter breakdown voltage	I _C =-10mA, I _B =0	V _{CEO}	-45			V
Emitter-base breakdown voltage	I _E =-1μA, I _C =0	V _{EBO}	-5			V
Collector-base cut-off current	V _{CB} =-20V, I _E =0	I _{CBO}			-0.1	uA
Collector-emitter cut-off current	V _{CE} =-20V, I _B =0	I _{CEO}			-0.2	uA
Emitter-base cut-off current	V _{EB} =-5V, I _C =0	I _{EBO}			-0.1	uA
DC current gain	V _{CE} =-1V, I _C =-100mA	h _{FE}	100		600	V
Collector-emitter saturation voltage	I _C =-500mA, I _B =-50mA	V _{CE(sat)}	-		-0.7	V
Base-emitter voltage	I _C =-500mA, V _{CE} =-1V	V _{BE}	-		-1.2	V
Transition frequency	V _{CE} =-5V, I _C =-10mA, f=100MHz	f _T	80			MHz
Collector output capacitance	V _{CB} =-10V, f=1MHz	C _{ob}			10	pF

SOT-323 Outline Dimension



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	2.150	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°

Device Marking :

Device P/N	Classification of h_{FE}	Marking code
BC807-16W	100-250	5A
BC807-25W	160-400	5B
BC807-40W	250-600	5C

Electrical characteristic curves

Fig.1 DC current gain vs. collector current _BC807W-16

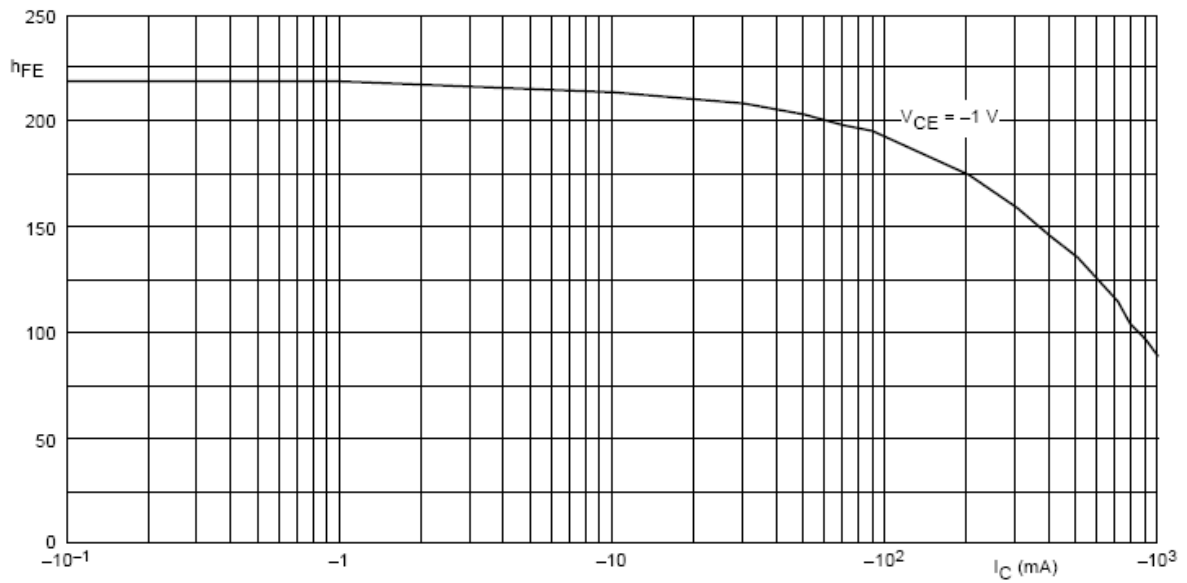


Fig.2 DC current gain vs. collector current _BC807W-25

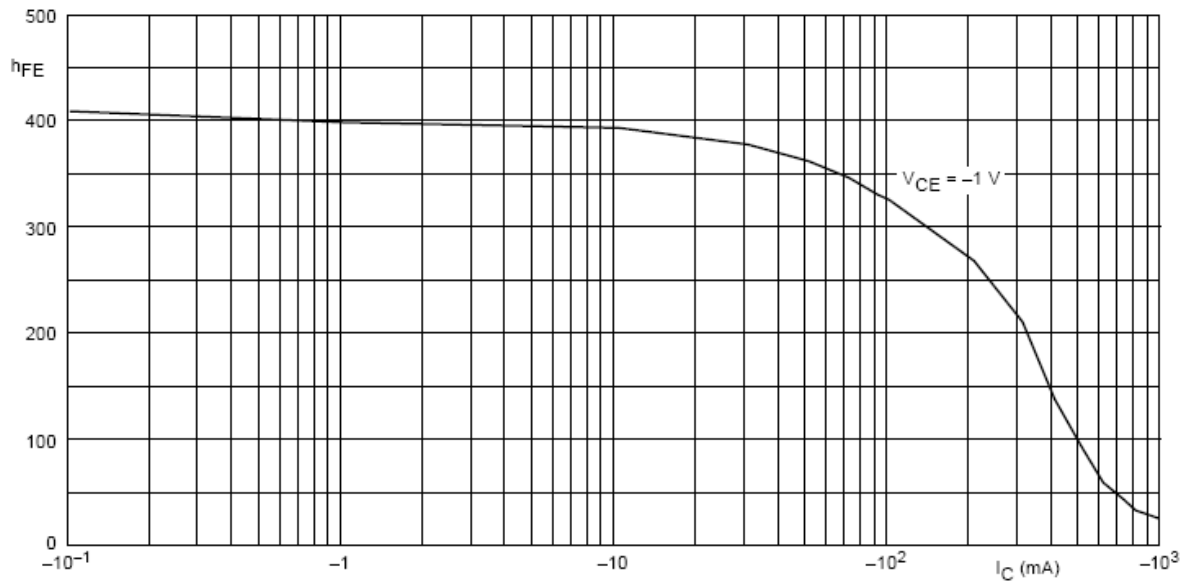
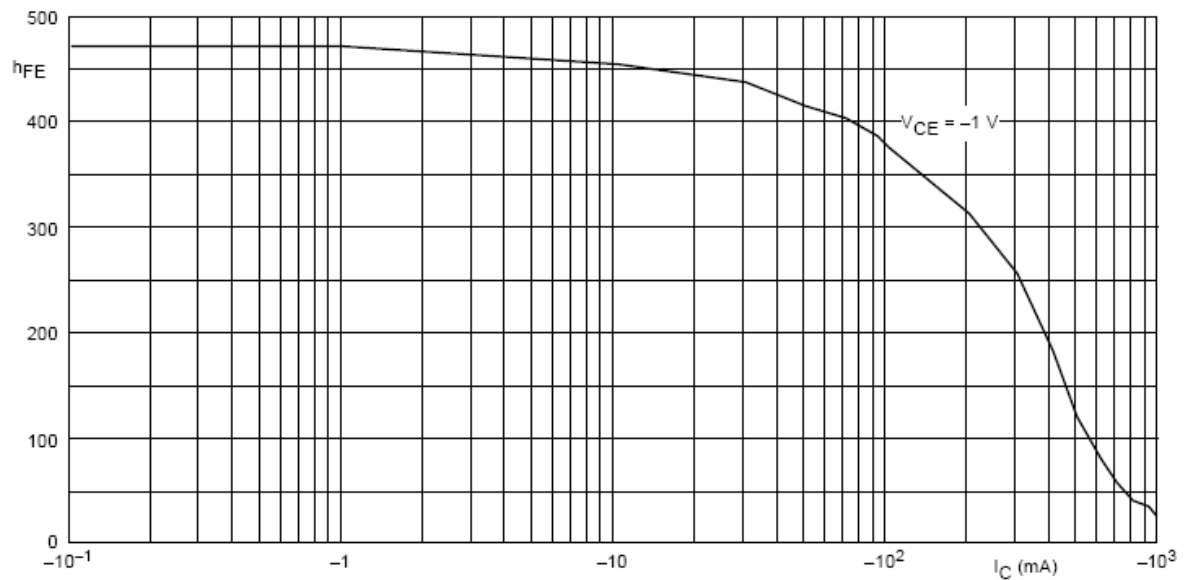


Fig.3 DC current gain vs. collector current _BC807W-40



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