



Micro Commercial Components

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20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

BC807-16W
BC807-25W
BC807-40W

Features

- Capable of 0.2Watts of Power Dissipation.
- Collector-current 0.5A
- Collector-base Voltage 50V
- Operating and storage junction temperature range: -55°C to +150°C
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

Mechanical Data

- Case: SOT-323 Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Weight: 0.005 grams (approx.)
- Device Marking:
BC807-16W 5A
BC807-25W 5B
BC807-40W 5C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
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OFF CHARACTERISTICS

$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=10mA$, $I_B=0$)	45	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=10uA$, $I_E=0$)	50	---	Vdc
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage ($I_E=1.0uA$, $I_C=0$)	5.0	---	Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=20V$, $I_E=0$)	---	0.1	μA
I_{CEO}	Collector Cutoff Current ($V_{CE}=20V$, $I_B=0$)	---	0.2	μA
I_{EBO}	Emitter Cutoff Current ($V_{EB}=5.0V$, $I_C=0$)	---	0.1	μA

ON CHARACTERISTICS

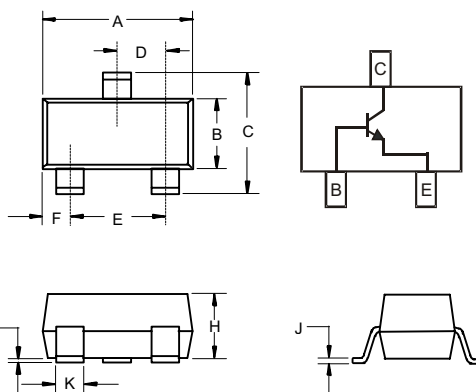
$h_{FE(1)}$	DC Current Gain ($I_C=100mA$, $V_{CE}=1.0V$) BC807-16W BC807-25W BC807-40W	100 160 250	250 400 600	---
$h_{FE(2)}$	DC Current Gain ($I_C=500mA$, $V_{CE}=1.0V$)	40	---	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=500mA$, $I_B=50mA$)	---	0.7	Vdc
$V_{BE(on)}$	Base-Emitter Voltage ($I_C=500mA$, $V_{CE}=1V$)	---	1.2	Vdc

SMALL SIGNAL CHARACTERISTICS

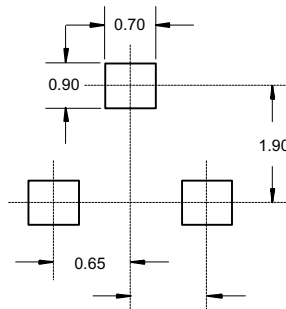
f_T	Current-Gain-Bandwidth Product ($V_{CE}=5.0V$, $f=100MHz$, $I_C=10mA$)	80	---	MHz
C_{ob}	Collector output capacitance ($V_{CB}=10V$, $f=1MHz$)		10	pF

PNP Silicon General Purpose Transistors

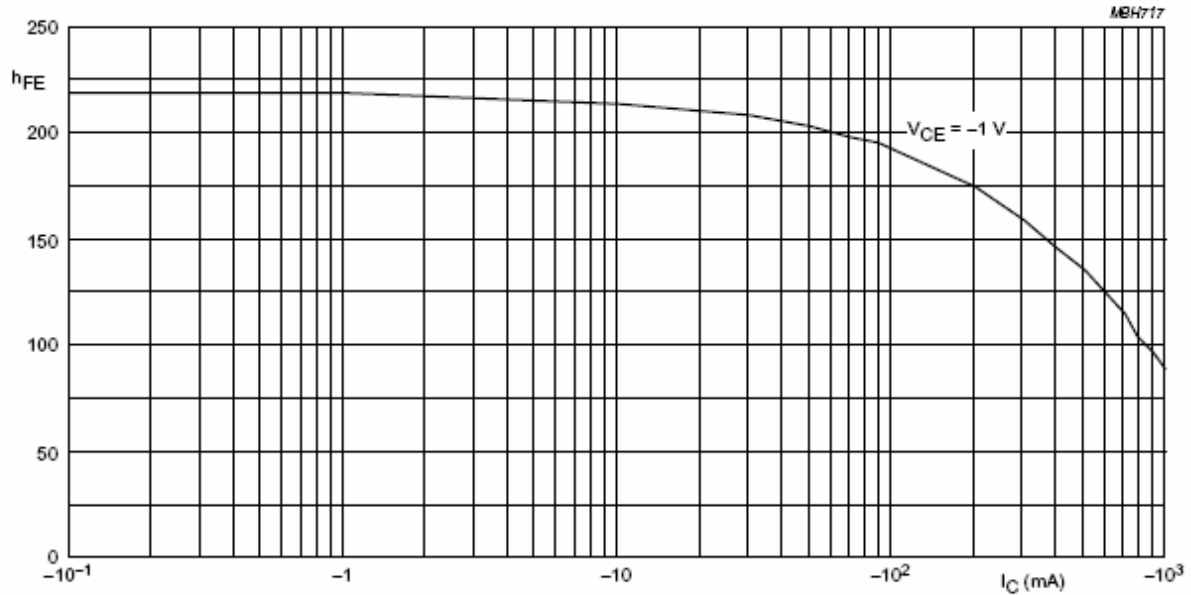
SOT-323



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.079	.087	2.00	2.20	
D	.026 Nominal		0.65 Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.012	.016	.30	.40	

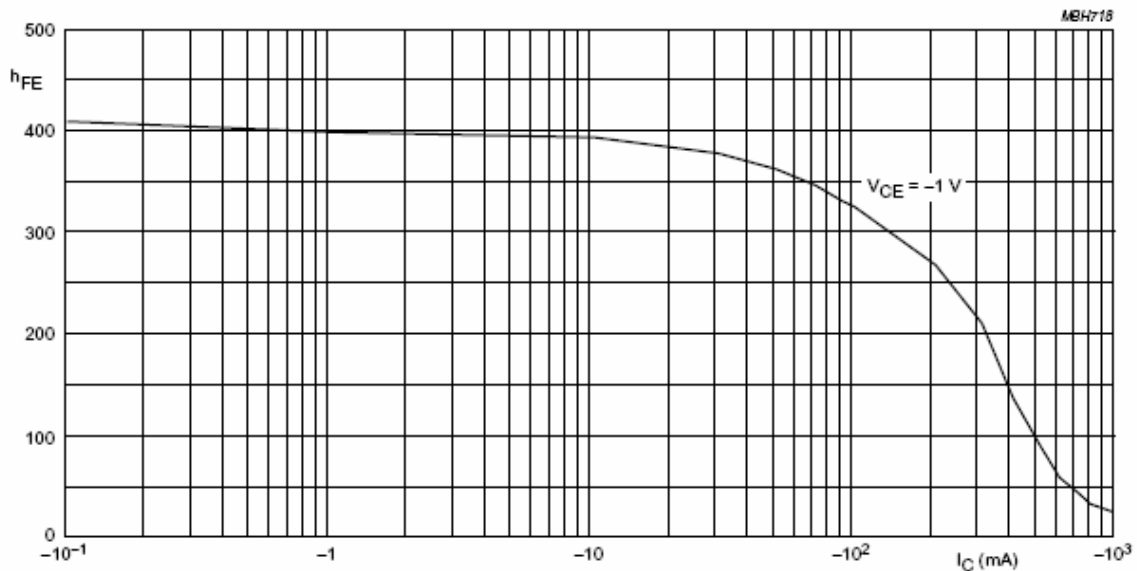


BC807-16W thru BC807-40W



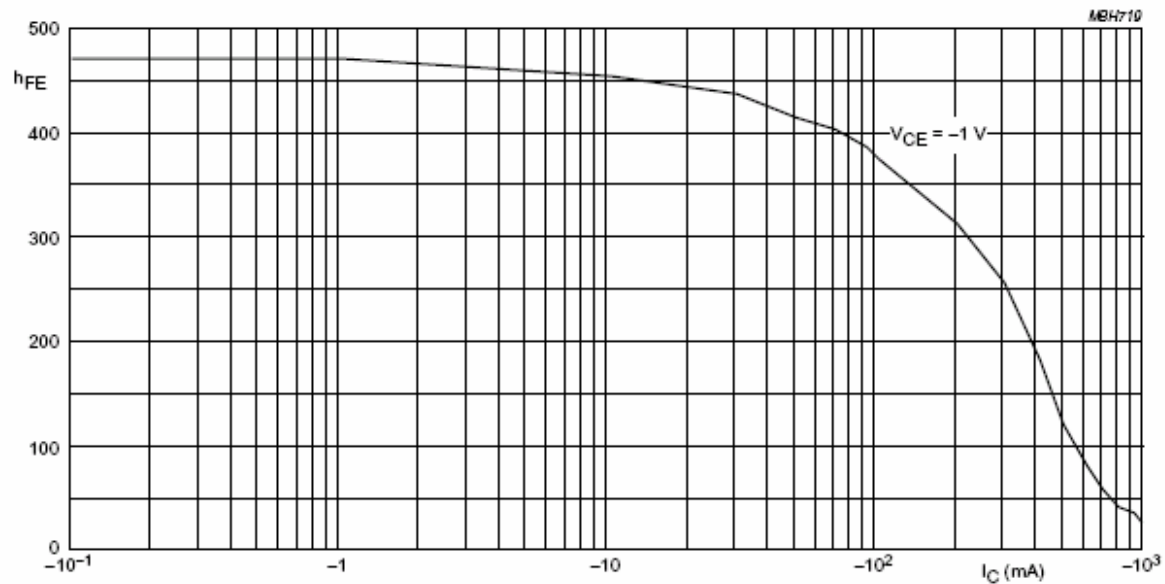
BC807-16W.

Fig.2 DC current gain; typical values.



BC807-25W.

Fig.3 DC current gain; typical values.



BC807-40W.

Fig.4 DC current gain; typical values.

Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel

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