



Micro Commercial Components



Micro Commercial Components  
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**BC807-16W**  
**BC807-25W**  
**BC807-40W**

**PNP Silicon**  
**General Purpose**  
**Transistors**

## Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Capable of 0.2Watts of Power Dissipation.
- Collector-current 0.5A
- Operating and storage junction temperature range: -55°C to +150°C

## 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 ( $I_C=10mA_{dc}$ , $I_B=0$ )	45	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C=10uA_{dc}$ , $I_E=0$ )	50	---	Vdc
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage ( $I_E=1.0uA_{dc}$ , $I_C=0$ )	5.0	---	Vdc
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=20V_{dc}$ , $I_E=0$ )	---	0.1	$\mu A_{dc}$
$I_{CEO}$	Collector Cutoff Current ( $V_{CE}=20V_{dc}$ , $I_B=0$ )	---	0.2	$\mu A_{dc}$
$I_{EBO}$	Emitter Cutoff Current ( $V_{EB}=5.0V_{dc}$ , $I_C=0$ )	---	0.1	$\mu A_{dc}$

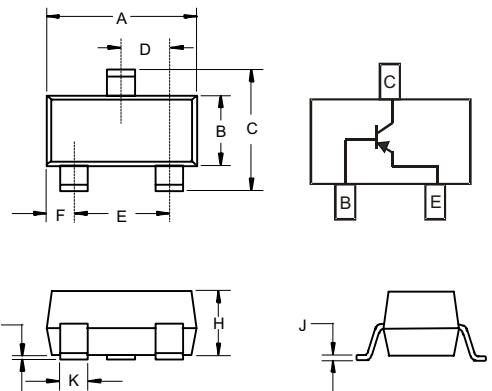
### ON CHARACTERISTICS

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

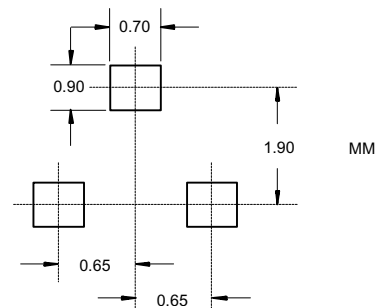
### SMALL SIGNAL CHARACTERISTICS

$f_T$	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

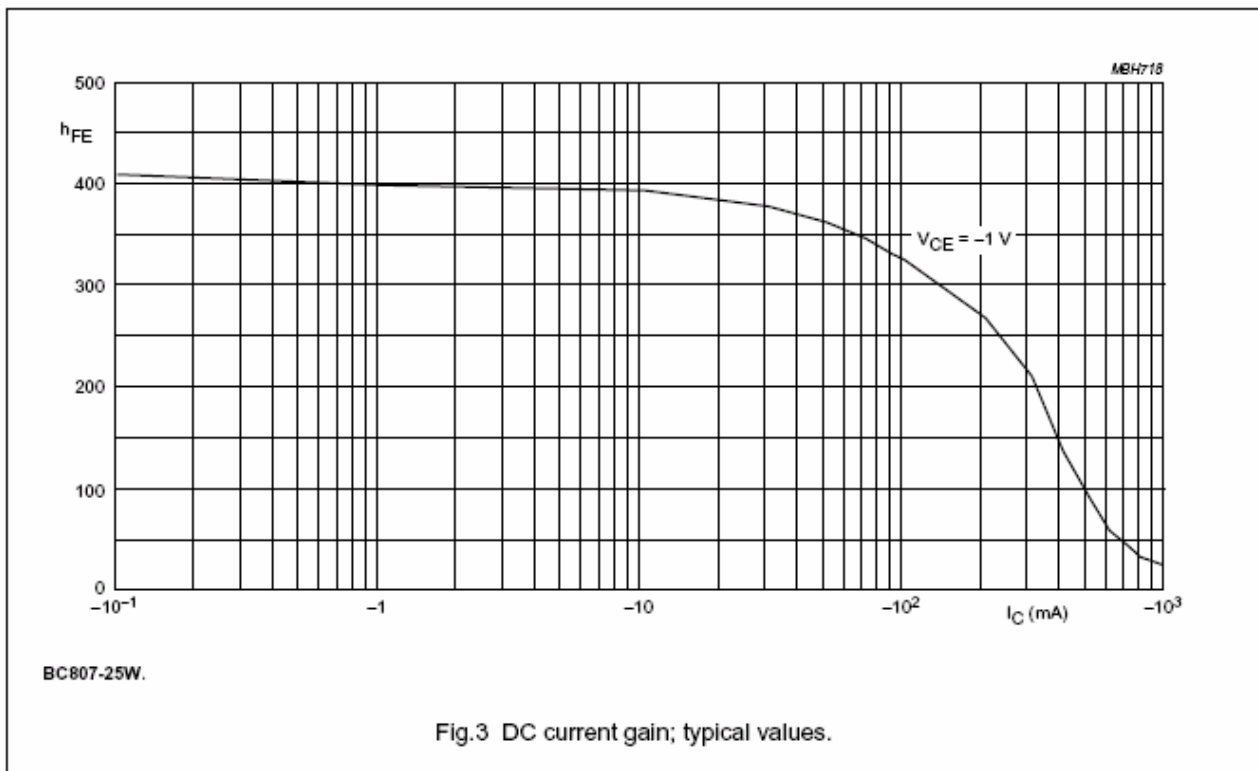
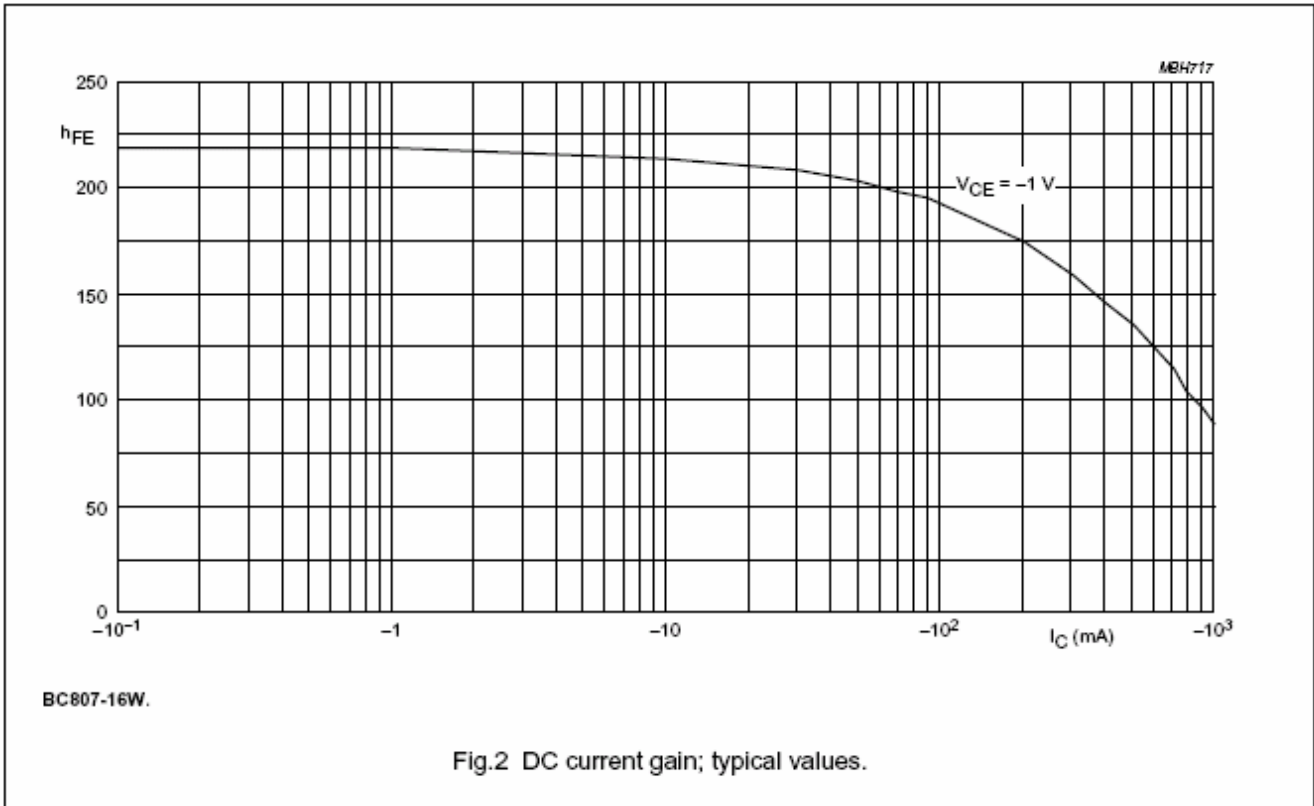
## SOT-323

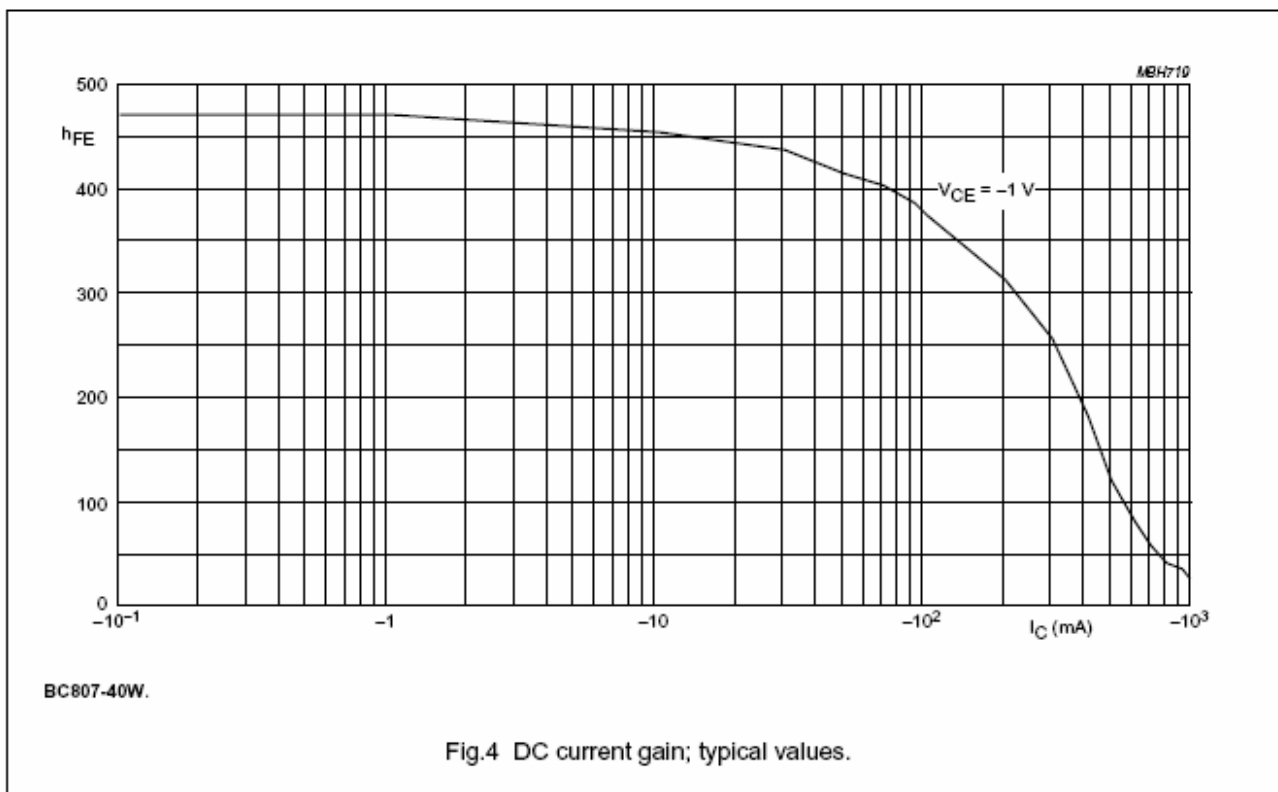


DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.079	.087	2.00	2.20	
D	.026 Nominal		0.65Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.012	.016	.30	.40	



BC807-16W thru BC807-40W







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Ordering Information :

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

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