



Micro Commercial Components

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BC807-16
BC807-25
BC807-40

Features

- Capable of 0.3Watts 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-23 Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Weight: 0.008 grams (approx.)
- Device Marking: BC807-16 5A1
BC807-25 5B
BC807-40 5C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
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OFF CHARACTERISTICS

$V_{(BR)CEO}$	Collector-Emmitter 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-Emmitter Breakdown Voltage ($I_E=1.0mA$, $I_C=0$)	5.0	---	Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=45Vdc$, $I_E=0$)	---	0.1	μA
I_{CEO}	Collector Cutoff Current ($V_{CE}=40Vdc$, $I_B=0$)	---	0.2	μA
I_{EBO}	Emmitter Cutoff Current ($V_{EB}=4.0Vdc$, $I_C=0$)	---	0.1	μA

ON CHARACTERISTICS

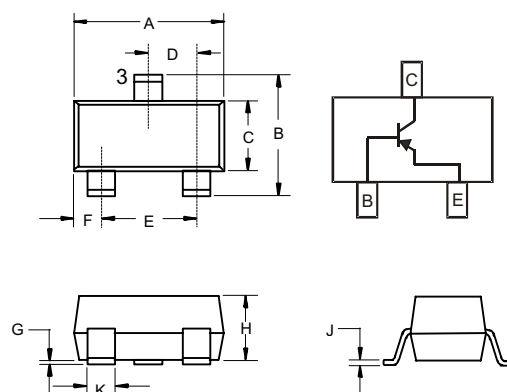
$h_{FE(1)}$	DC Current Gain ($I_C=10mA$, $V_{CE}=1.0Vdc$) BC807-16 BC807-25 BC807-40	100 160 250	250 400 600	---
$h_{FE(2)}$	DC Current Gain ($I_C=500mA$, $V_{CE}=1.0Vdc$)	40	---	---
$V_{CE(sat)}$	Collector-Emmitter Saturation Voltage ($I_C=500mA$, $I_B=50mA$)	---	0.7	Vdc
$V_{BE(sat)}$	Base-Emmitter Saturation Voltage ($I_C=500mA$, $I_B=50mA$)	---	1.2	Vdc

SMALL SIGNAL CHARACTERISTICS

f_T	Current-Gain-Bandwidth Product ($V_{CE}=5.0V$, $f=100MHz$, $I_C=10mA$)	100	---	MHz
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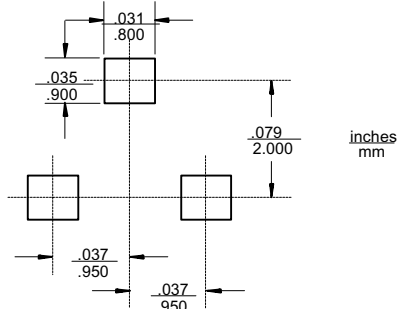
PNP Silicon General Purpose Transistors

SOT-23



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.098	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

Suggested Solder Pad Layout



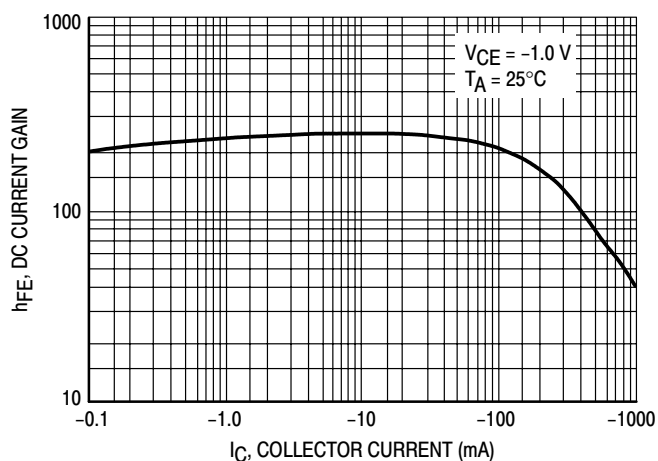


Figure 1. DC Current Gain

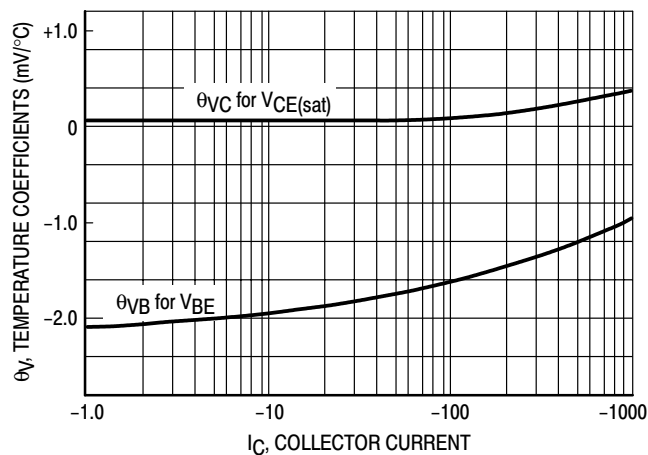


Figure 4. Temperature Coefficients

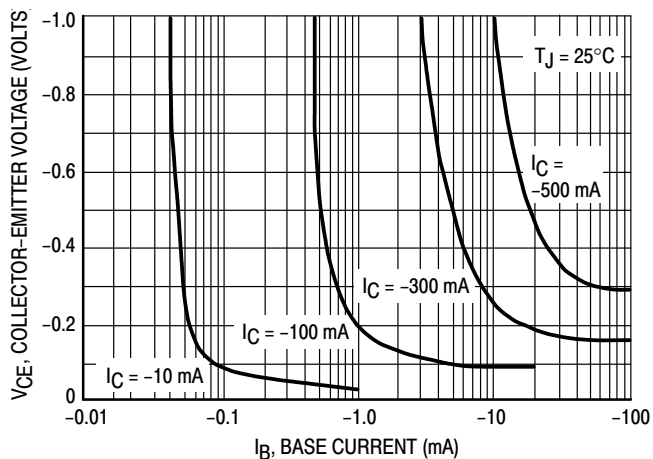


Figure 2. Saturation Region

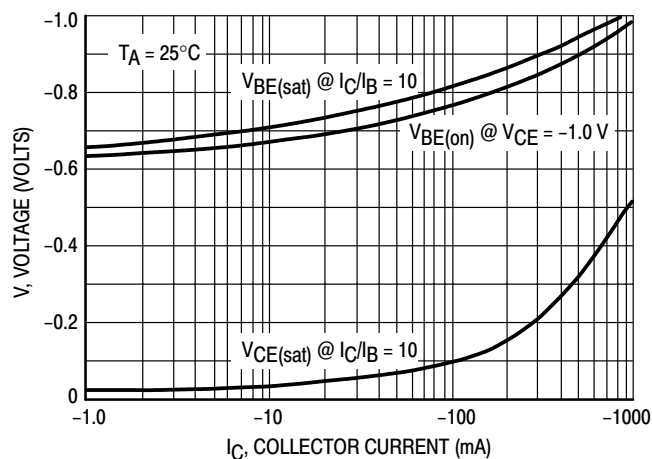


Figure 3. "On" Voltages

Ordering Information

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

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