



Micro Commercial Components

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BC808-16
BC808-25
BC808-40

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Capable of 0.3Watts of Power Dissipation.
- Collector-current 0.8A
- Operating and storage junction temperature range: -65°C to +150°C
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

Mechanical Data

- Case: SOT-23 Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Weight: 0.008 grams (approx.)
- Device Marking: BC808-16 5E
BC808-25 5F
BC808-40 5G

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 ($I_C=-10\text{mAdc}$, $I_E=0$)	-25	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=-100\mu\text{Adc}$, $I_E=0$)	-30	---	Vdc
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage ($I_E=-100\mu\text{Adc}$, $I_C=0$)	-5.0	---	Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=-25\text{Vdc}$, $I_E=0$)	---	-0.1	μAdc
I_{EBO}	Emitter Cutoff Current ($V_{EB}=-4.0\text{Vdc}$, $I_C=0$)	---	-0.1	μAdc

ON CHARACTERISTICS

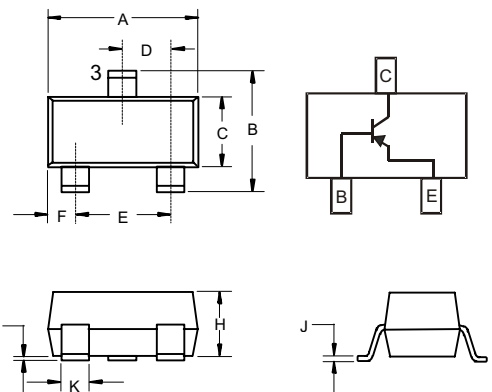
$h_{FE(1)}$	DC Current Gain ($I_C=-100\text{mAdc}$, $V_{CE}=-1.0\text{Vdc}$) BC808-16 BC808-25 BC808-40	100 160 250	250 400 630	---
$h_{FE(2)}$	DC Current Gain ($I_C=-300\text{mAdc}$, $V_{CE}=-1.0\text{Vdc}$)	60	---	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=-500\text{mAdc}$, $I_E=-50\text{mAdc}$)	---	-0.7	Vdc
V_{BE}	Base-Emitter Voltage ($V_{CE}=-1\text{Vdc}$, $I_C=-300\text{mAdc}$)	---	-1.2	Vdc

SMALL SIGNAL CHARACTERISTICS

f_T	Transition frequency ($V_{CE}=-5.0\text{V}$, $f=50\text{MHz}$, $I_C=-10\text{mA}$)	100	---	MHz
C_{ob}	Collector output capacitance ($V_{CE}=-5.0\text{V}$, $f=50\text{MHz}$, $I_C=-10\text{mA}$)	12	---	pF

PNP Silicon General Purpose Transistors

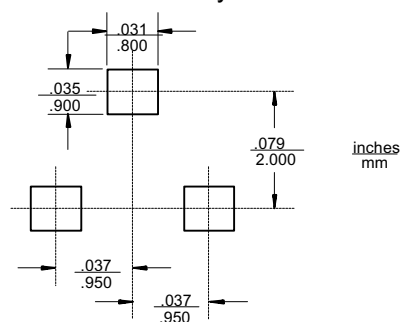
SOT-23



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.104	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



BC808-16 thru BC808-40

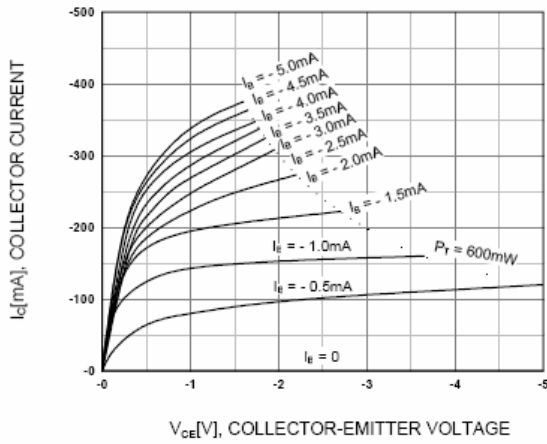


Figure 1. Static Characteristic

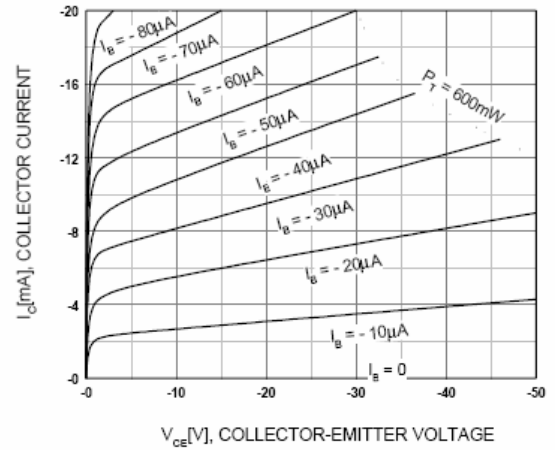


Figure 2. Static Characteristic

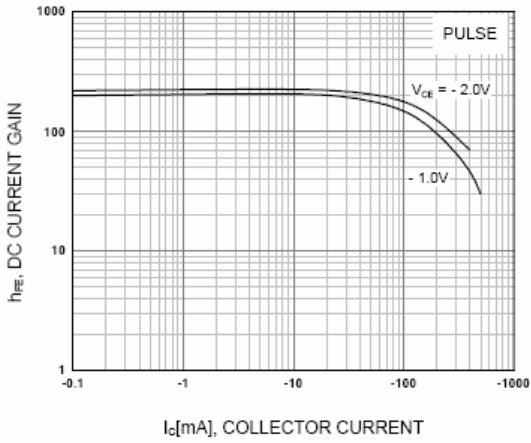


Figure 3. DC current Gain

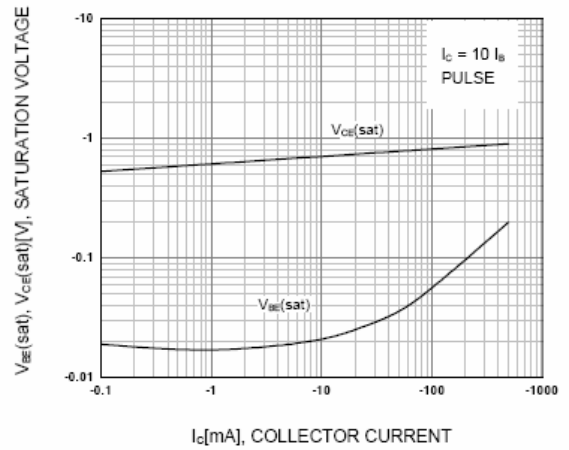


Figure 4. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

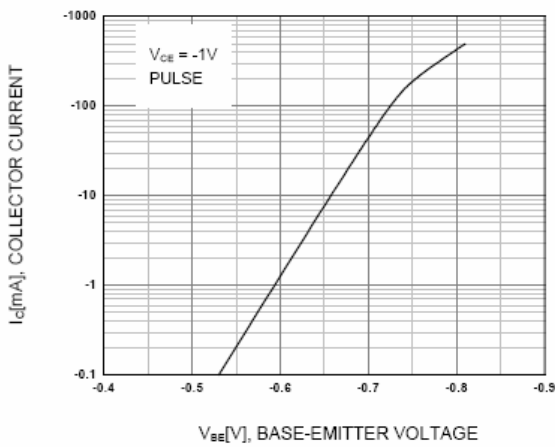


Figure 5. Base-Emitter On Voltage

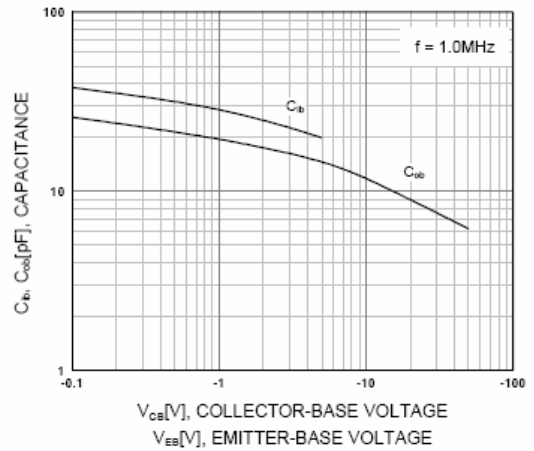


Figure 6. Input Output Capacitance



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Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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