

**Micro Commercial Components** 



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Min

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

- Moisure 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

Parameter

- Weight: 0.008 grams (approx.)
- Device Marking: BC808-16 5E

BC808-25 5F BC808-40 5G

### **Electrical Characteristics @ 25°C Unless Otherwise Specified**

Syllibol	raiametei	IVIIII	IVIAA	Office
OFF CHARACTERISTICS				
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage (I <sub>C</sub> =-10mAdc, I <sub>B</sub> =0)		Vdc	
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage (I <sub>C</sub> =-100µAdc, I <sub>E</sub> =0)	-30		Vdc
$V_{(BR)EBO}$	Collector-Emitter Breakdown Voltage (I <sub>E</sub> =-100µAdc, I <sub>C</sub> =0)	-5.0		Vdc
Сво	Collector Cutoff Current (V <sub>CB</sub> =-25Vdc,I <sub>E</sub> =0)		-0.1	μAdc
I <sub>EBO</sub>	Emitter Cutoff Current (V <sub>EB</sub> =-4.0Vdc, I <sub>C</sub> =0)		-0.1	μAdc

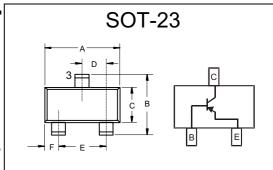
### **ON CHARACTERISTICS**

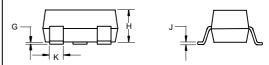
h <sub>FE(1)</sub>	DC Current Gain			
	(I <sub>C</sub> =-100mAdc, V <sub>CE</sub> =-1.0Vdc)			
	BC808-16	100	250	
	BC808-25	160	400	
	BC808-40	250	630	
h <sub>FE(2)</sub>	DC Current Gain	60		
	$(I_C=-300 \text{ mAdc}, V_{CE}=-1.0 \text{ Vdc})$			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage		-0.7	Vdc
. ,	$(I_C=-500 \text{mAdc}, I_B=-50 \text{mAdc})$			
$V_{BE}$	Base-Emitter Voltage		-1.2	Vdc
	$(V_{CE}=-1Vdc, I_{C}=-300mAdc)$			

### **SMALL SIGNAL CHARACTERISTICS**

$f_{T}$	Transition frequency	100	 MHz
	(V <sub>CE</sub> =-5.0V, f=50MHz, l <sub>C</sub> =-10mA)		
C <sub>ob</sub>	Collector output capacitance	12	 рF
	(V <sub>CE</sub> =-5.0V, f=50MHz, I <sub>C</sub> =-10mA)		

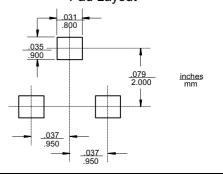
# **PNP Silicon General Purpose Transistors**





DIMENSIONS					
	INCHES MI		М		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.110	.120	2.80	3.04	
В	.083	.104	2.10	2.64	
С	.047	.055	1.20	1.40	
О	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
Ð	.0005	.0039	.013	.100	
I	.035	.044	.89	1.12	
٦	.003	.007	.085	.180	
K	.015	.020	.37	.51	

### Suggested Solder Pad Layout



2013/01/01



# BC808-16 thru BC808-40

# **Micro Commercial Components**

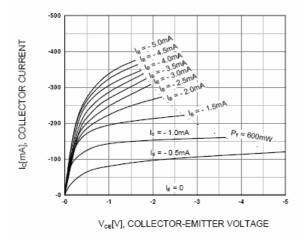


Figure 1. Static Characteristic

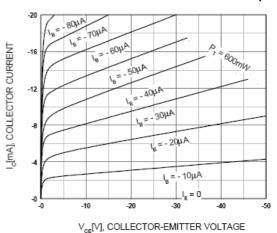


Figure 2. Static Characteristic

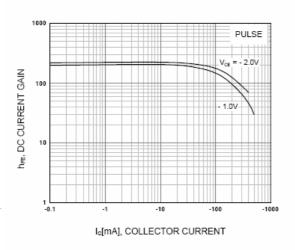


Figure 3. DC current Gain

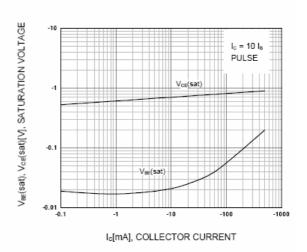


Figure 4. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

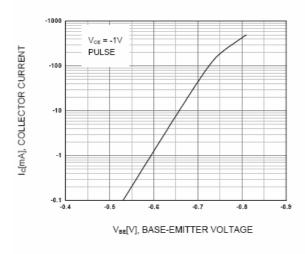


Figure 5. Base-Emitter On Voltage

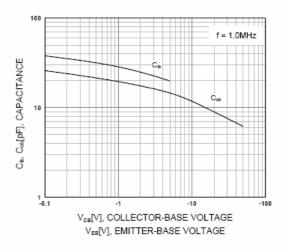


Figure 6. Input Output Capacitance



### **Micro Commercial Components**

## **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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