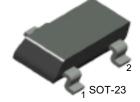


BC807/BC808

Switching and Amplifier Applications

- Suitable for AF-Driver stages and low power output stages
- Complement to BC817/BC818



1. Base 2. Emitter 3. Collector

PNP Epitaxial Silicon Transistor

Absolute Maximum Ratings Ta=25°C unless otherwise noted

Symbol	Parameter	Value	Units	
V _{CES}	Collector-Emitter Voltage			
	: BC807	-50	V	
	: BC808	-30	V	
V _{CEO}	Collector-Emitter Voltage			
	: BC807	-45	V	
	: BC808	-25	V	
V _{EBO}	Emitter-Base Voltage	-5	V	
I _C	Collector Current (DC)	-800	mA	
P _C	Collector Dissipation	-310	mW	
P _C	Junction Temperature	150	°C	
T _{STG}	Storage Temperature	-65 ~ 150	°C	

Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV _{CEO}	Collector-Emitter Breakdown Voltage	I _C = -10mA, I _B =0				
	: BC807		-45			V
	: BC808		-25			V
BV _{CES}	Collector-Emitter Breakdown Voltage	I _C = -0.1mA, V _{BF} =0				
020	: BC807		-50			V
	: BC808		-30			V
BV _{EBO}	Emitter-Base Breakdown Voltage	I _E = -0.1mA, I _C =0	-5			V
I _{CES}	Collector Cut-off Current	V _{CE} = -25V, V _{BE} =0			-100	nA
I _{EBO}	Emitter Cut-off Current	V _{EB} = -4V, I _C =0			-100	nA
h _{FF1}	DC Current Gain	V _{CF} = -1V, I _C = -100mA	100		630	
h _{FE2}		V _{CE} = -1V, I _C = -300mA	60			
V _{CE} (sat)	Collector-Emitter Saturation Voltage	I _C = -500mA, I _B = -50mA			-0.7	V
V _{BE} (on)	Base-Emitter On Voltage	$V_{CE} = -1V, I_{C} = -300 \text{mA}$			-1.2	V
f _T	Current Gain Bandwidth Product	V _{CE} = -5V, I _C = -10mA f=50MHz		100		MHz
C _{ob}	Output Capacitance	V _{CB} = -10V, f=1MHz			12	pF

h_{FE} Classification

Classification	16	25	40
h _{FE1}	100 ~ 250	160 ~ 400	250 ~ 630
h _{FE2}	60-	100-	170-

Marking Code

Туре	807-16	807-25	807-40	808-16	808-25	808-40
Marking	9FA	9FB	9FC	9GA	9GB	9GC

Typical Characteristics

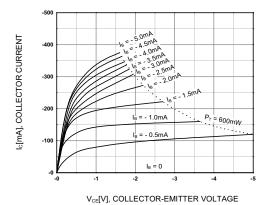


Figure 1. Static Characteristic

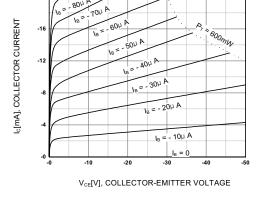


Figure 2. Static Characteristic

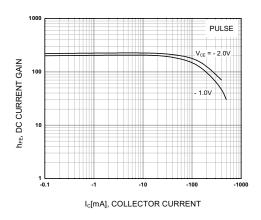


Figure 3. DC current Gain

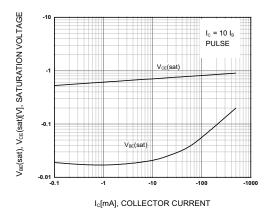


Figure 4. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

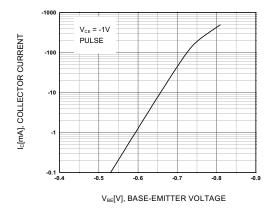


Figure 5. Base-Emitter On Voltage

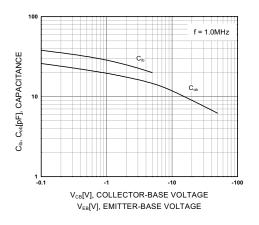


Figure 6. Input Output Capacitance

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Typical Characteristics (Continued)

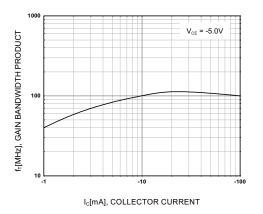
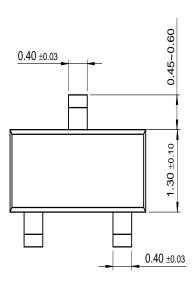


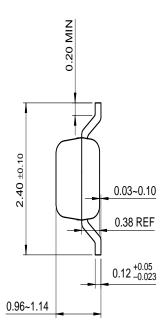
Figure 7. Current Gain Bandwidth Product

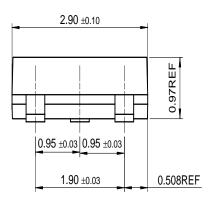
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Package Demensions

SOT-23







Dimensions in Millimeters

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FASTr[™] SuperSOT[™]-3
GTO[™] SuperSOT[™]-6

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