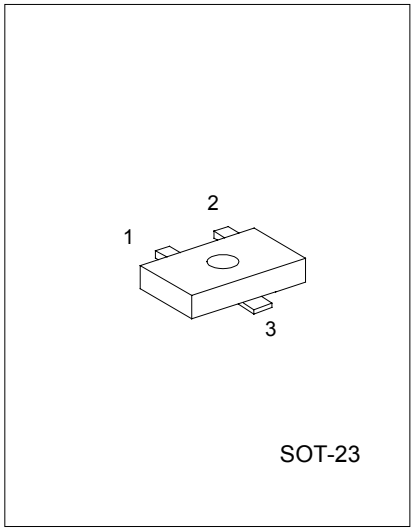
UTC BC807/BC808 PNP EPITAXIAL SILICON TRANSISTOR

SWITCHING AND AMPLIFIER APPLICATIONS

FEATURES

*Suitable for AF-Driver stages and low power output stages

*Complement to BC817 / BC818



1: EMITTER 2: BASE 3: COLLECTOR

ABSOLUTE MAXIMUM RATINGS (Ta=25°C, unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Emitter Voltage	V_{CES}		
BC807		-50	V
BC808		-30	V
Collector-Emitter Voltage	V_{CE0}		
BC807		-45	V
BC808		-25	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current (DC)	Ic	-800	mA
Collector Dissipation	Pc	-310	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-65 to +150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=-10mA, I_B=0				
BC807			-45			V
BC808			-25			V
Collector-Emitter Breakdown Voltage	BV_{CES}	I_C=-0.1mA, V_{BE}=0				
BC807			-50			V
BC808			-30			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E=-0.1mA, Ic=0	-5			V
Collector Cut-off Current	I_{CES}	V_{CE}=-25V, V_{BE}=0			-100	nA
Emitter Cut-off Current	I_{EBO}	V_{EB}=-4V, Ic=0			-100	nA

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
DC Current Gain	h_{FE1}	Ic=-100mA, V_{CE}=-1V	100		630	
	h_{FE2}	Ic=-300mA, V_{CE}=-1V	60			
Collector-Emitter Saturation Voltage	V_{CE}(sat)	Ic=-500mA, I_B=-50mA			-0.7	V
Base-Emitter On Voltage	V_{BE}(on)	Ic=-300mA, V_{CE}=-1V			-1.2	V
Current Gain Bandwidth Product	f_T	V_{CE}=-5V, Ic=-10mA, f=50MHz		100		MHz
Output Capacitance	Cob	V_{CB}=-10V, f=1MHz			12	pF

Classification of h_{FE}

RANK	16	25	40
h_{FE1}	100-250	160-400	250-630
h_{FE2}	60-	100-	170-

Marking Code

TYPE	807-16	807-25	807-40	808-16	808-25	808-40
MARK	9FA	9FB	9FC	9GA	9GB	9GC

TYPICAL CHARACTERISTICS

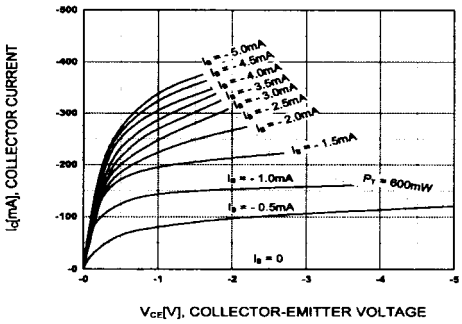


Figure 1. Static Characteristic

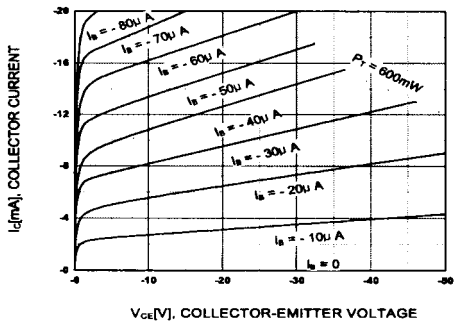


Figure 2. Static Characteristic

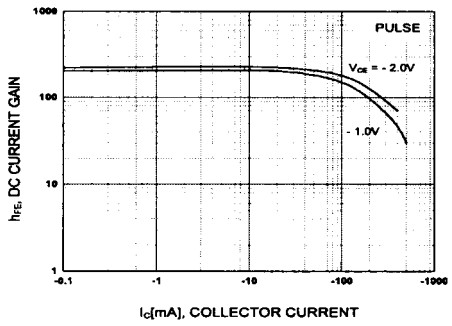


Figure 3. DC current Gain

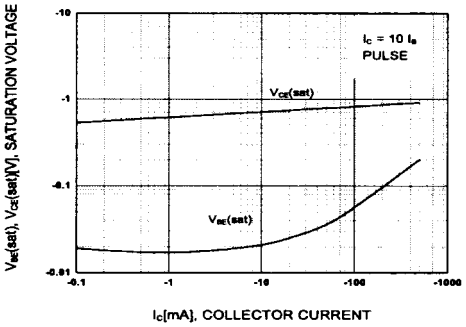


Figure 4. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

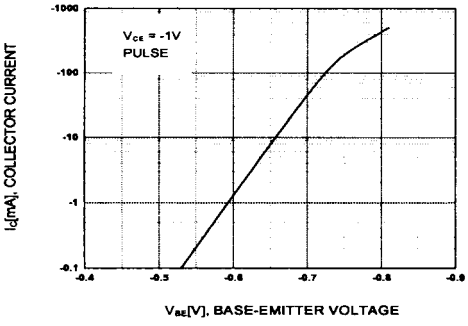


Figure 5. Base-Emitter On Voltage

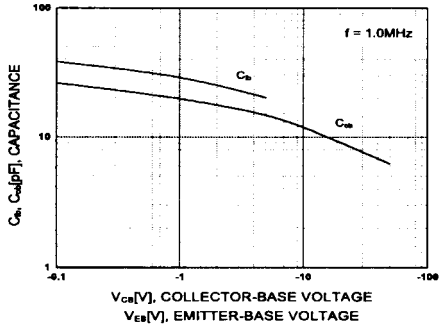


Figure 6. Input Output Capacitance

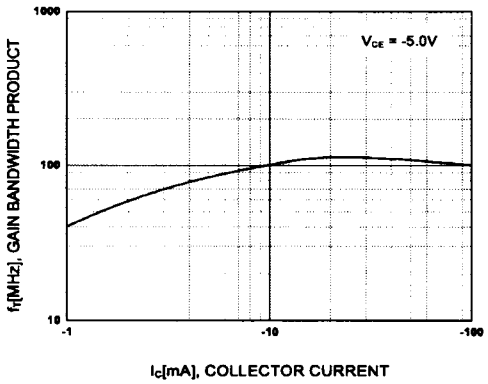


Figure 7. Current Gain Bandwidth Product