

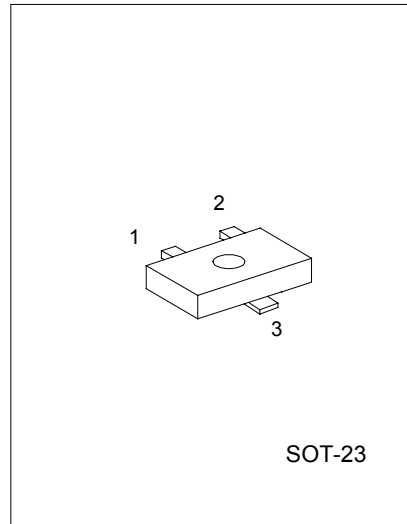
UTCBC807/BC808 PNP EPITAXIAL SILICON TRANSISTOR

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}	-50	V
BC807		-30	V
BC808			
Collector-Emitter Voltage	V _{CEO}	-45	V
BC807		-25	V
BC808			
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current (DC)	I _c	-800	mA
Collector Dissipation	P _c	-310	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-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	-45			V
BC807			-25			V
BC808						
Collector-Emitter Breakdown Voltage	BV _{CES}	I _c =-0.1mA, V _{BE} =0	-50			V
BC807			-30			V
BC808						
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E =-0.1mA, I _c =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, I _c =0			-100	nA

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

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TYPICAL CHARACTERISTICS

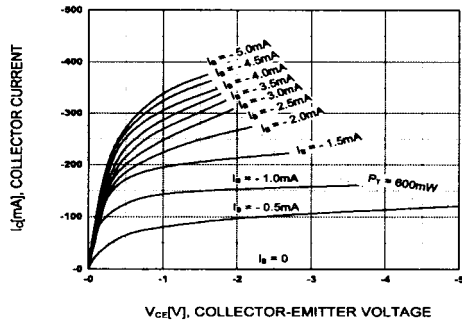


Figure 1. Static Characteristic

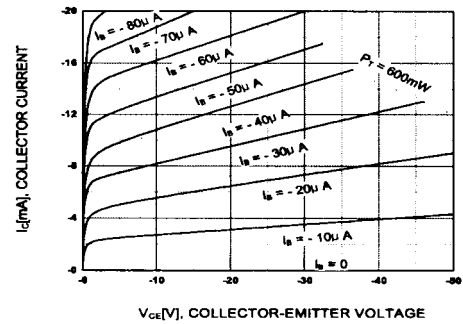


Figure 2. Static Characteristic

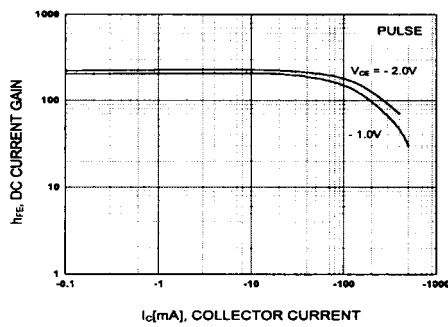


Figure 3. DC current Gain

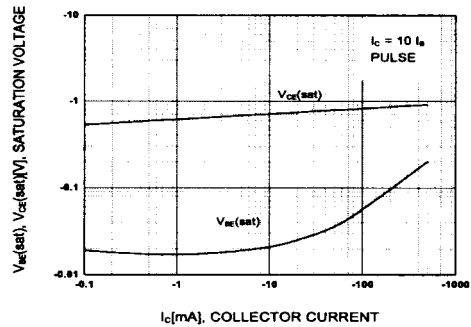


Figure 4. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

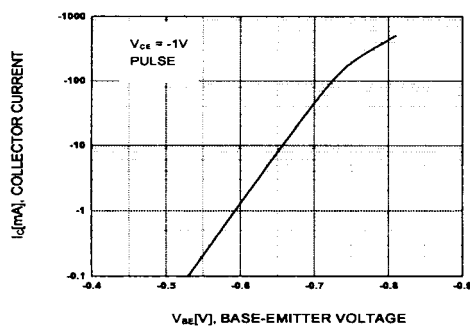


Figure 5. Base-Emitter On Voltage

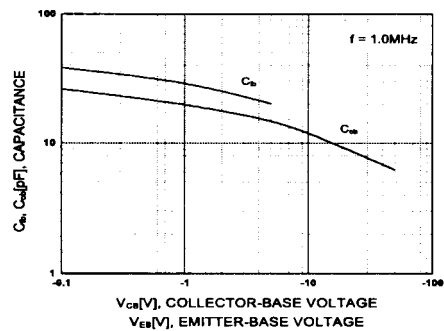


Figure 6. Input Output Capacitance

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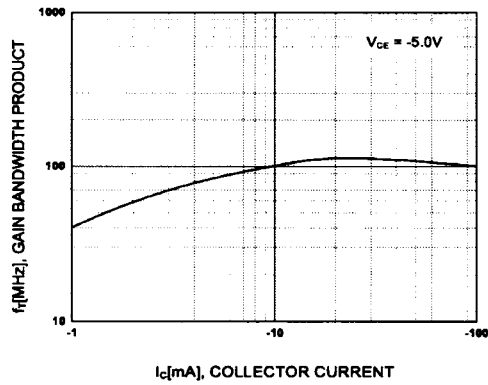


Figure 7. Current Gain Bandwidth Product

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