



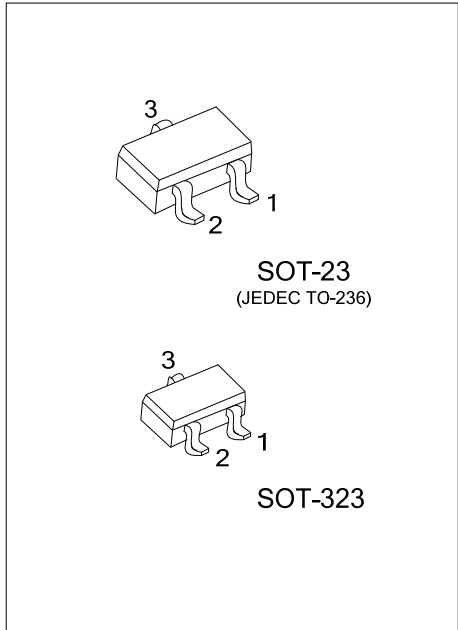
BC807/BC808

PNP SILICON TRANSISTOR

SWITCHING AND AMPLIFIER APPLICATIONS

■ **FEATURES**

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



■ **ORDERING INFORMATION**

Ordering Number	Package	Pin Assignment			Packing
		1	2	3	
BC807G-xx-AE3-R	SOT-23	E	B	C	Tape Reel
BC807G-xx-AL3-R	SOT-323	E	B	C	Tape Reel
BC808G-xx-AE3-R	SOT-23	E	B	C	Tape Reel
BC808G-xx-AL3-R	SOT-323	E	B	C	Tape Reel

Note: Pin Assignment: C: Collector B: Base E: Emitter

<p>BC807G-xx-AE3-R</p> <p>(1)Packing Type (2)Package Type (3)Rank (4)Green Package</p>	<p>(1) R: Tape Reel (2) AE3: SOT-23, AL3: SOT-323 (3) xx: refer to Classification of h_{FE} (4) G: Halogen Free and Lead Free</p>
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■ **MARKING**

807-16	807-25	807-40
808-16	808-25	808-40

BC807/BC808

PNP SILICON TRANSISTOR

■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT
Collector-Emitter Voltage	BC807	V_{CES}	-50	V
	BC808		-30	V
Collector-Emitter Voltage	BC807	V_{CEO}	-45	V
	BC808		-25	V
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	$^\circ\text{C}$
Storage Temperature		T_{STG}	-65 ~ +150	$^\circ\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$, unless otherwise noted)

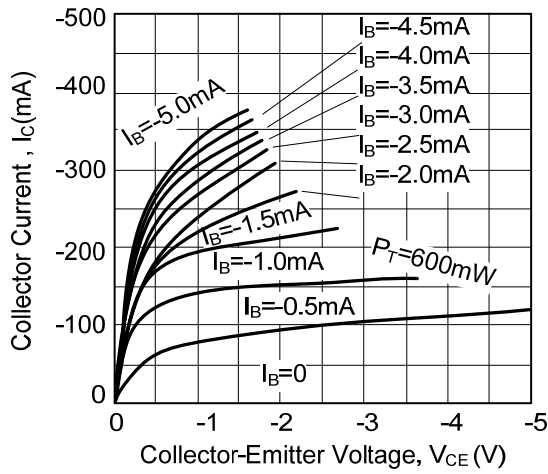
PARAMETER		SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BC807	BV_{CEO}	$I_C=-10\text{mA}, I_B=0$	-45			V
	BC808			-25			V
Collector-Emitter Breakdown Voltage	BC807	BV_{CES}	$I_C=-0.1\text{mA}, V_{BE}=0$	-50			V
	BC808			-30			V
Emitter-Base Breakdown Voltage		BV_{EBO}	$I_E=-0.1\text{mA}, I_C=0$	-5			V
Collector Cut-OFF Current		I_{CES}	$V_{CE}=-25\text{V}, V_{BE}=0$			-100	nA
Emitter Cut-OFF Current		I_{EBO}	$V_{EB}=-4\text{V}, I_C=0$			-100	nA
DC Current Gain		h_{FE1}	$I_C=-100\text{mA}, V_{CE}=-1\text{V}$	100		630	
		h_{FE2}	$I_C=-300\text{mA}, V_{CE}=-1\text{V}$	60			
Collector-Emitter Saturation Voltage		$V_{CE(SAT)}$	$I_C=-500\text{mA}, I_B=-50\text{mA}$			-0.7	V
Base-Emitter ON Voltage		$V_{BE(ON)}$	$I_C=-300\text{mA}, V_{CE}=-1\text{V}$			-1.2	V
Current Gain Bandwidth Product		f_T	$V_{CE}=-5\text{V}, I_C=-10\text{mA}, f=50\text{MHz}$		100		MHz
Output Capacitance		C_{ob}	$V_{CB}=-10\text{V}, f=1\text{MHz}$			12	pF

■ CLASSIFICATION OF h_{FE}

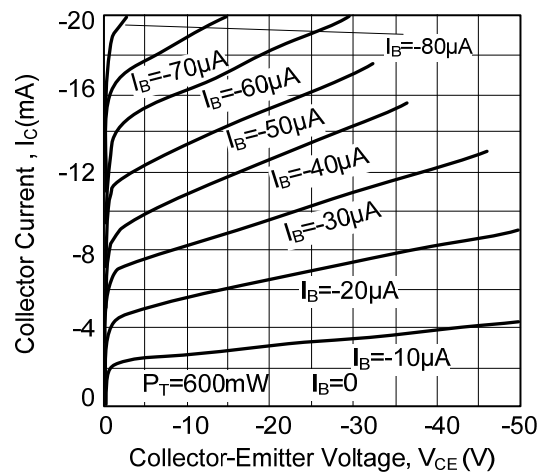
RANK	16	25	40
h_{FE1}	100-250	160-400	250-630
h_{FE2}	60-	100-	170-

TYPICAL CHARACTERISTICS

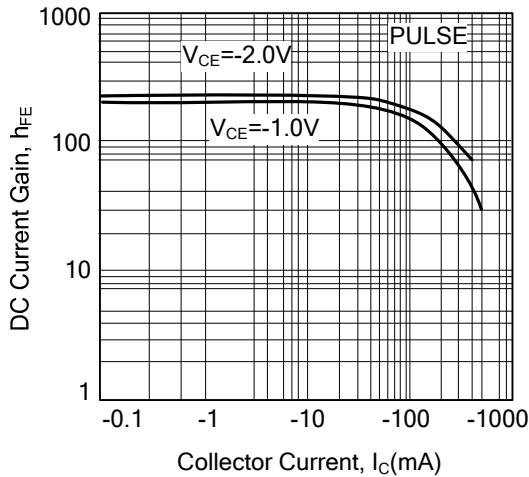
Static Characteristic



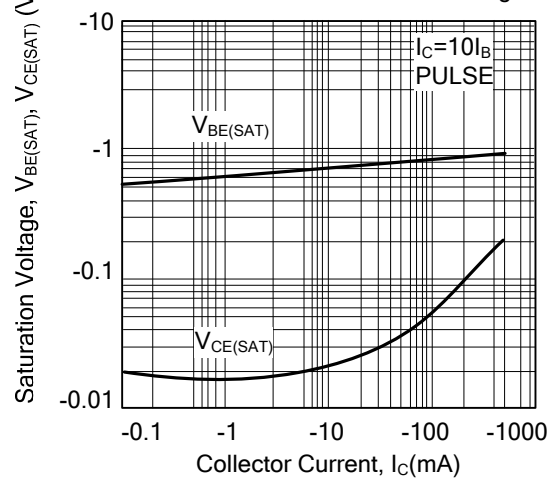
Static Characteristic



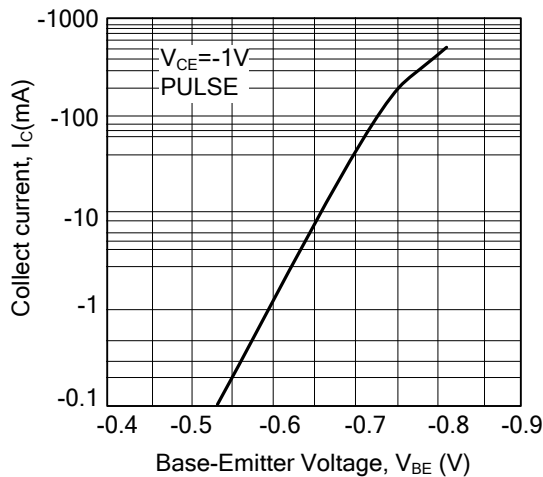
DC Current Gain



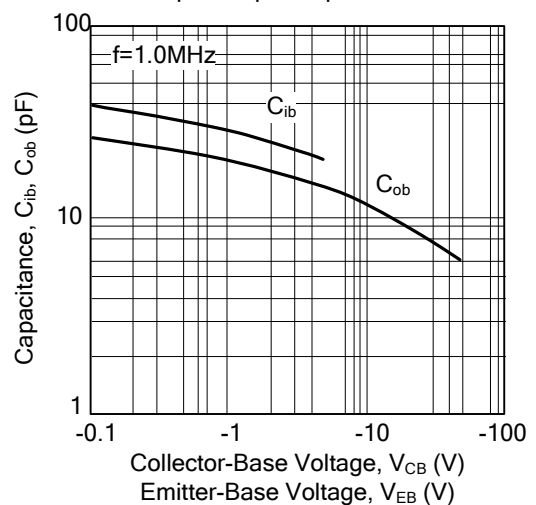
Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage



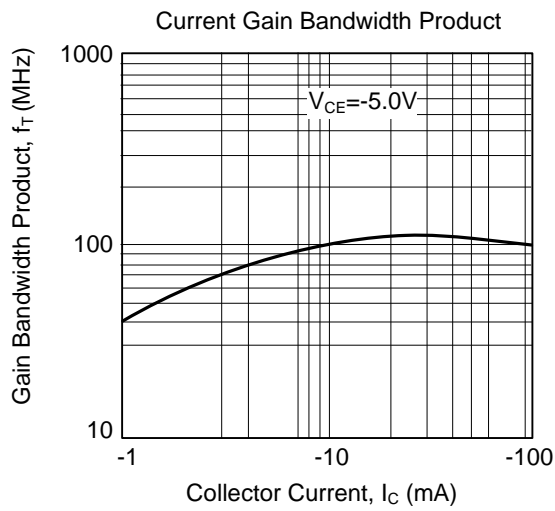
Base-Emitter On Voltage



Input Output Capacitance



■ TYPICAL CHARACTERISTICS(Cont.)



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