

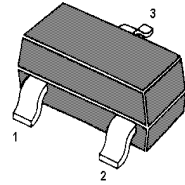
# BC807 / BC808-AH

## PNP Silicon Epitaxial Planar Transistors

for switching, AF driver and amplifier applications

These transistors are subdivided into three groups -16, -25 and -40, according to their current gain.

As complementary types the NPN transistors BC817 and BC818 are recommended.



1.BASE 2.EMITTER 3.COLLECTOR  
TO-236 Plastic Package

### Features

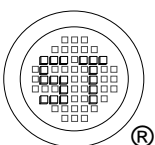
- AEC-Q101 Qualified and PPAP Capable
- Halogen and Antimony Free(HAF), RoHS compliant

### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Collector Base Voltage	BC807 BC808 $-V_{CBO}$	50 30	V
Collector Emitter Voltage	BC807 BC808 $-V_{CEO}$	45 25	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	500	mA
Power Dissipation	$P_{tot}$	300	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

### Electrical Characteristics at $T_a = 25\text{ }^\circ\text{C}$

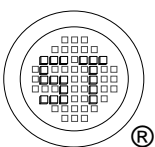
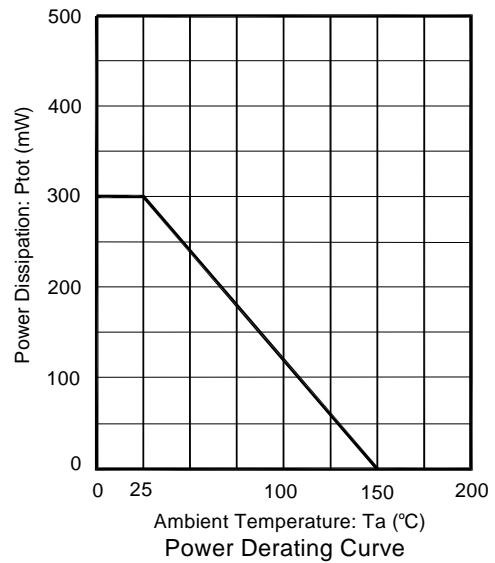
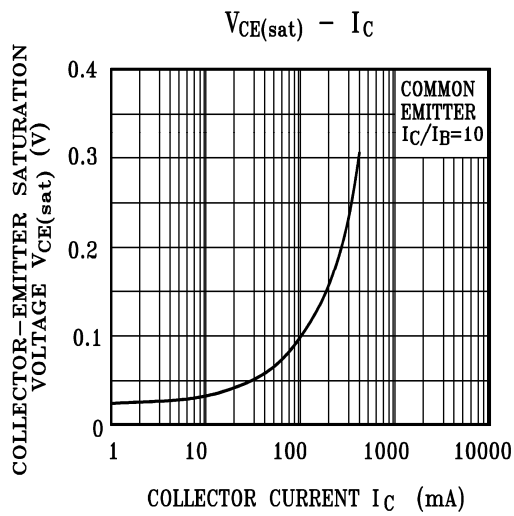
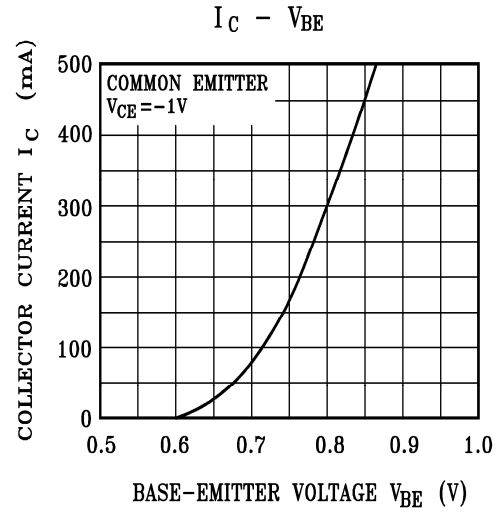
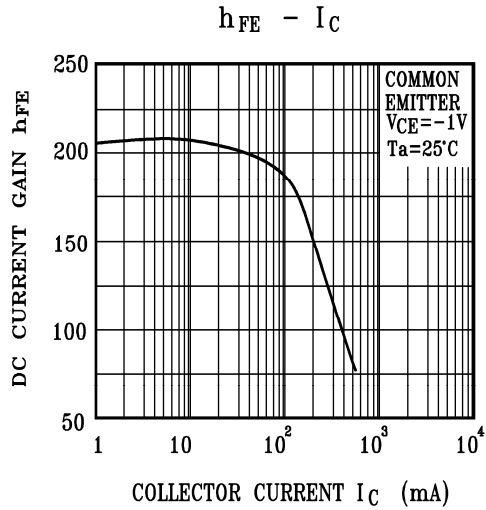
Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE} = 1\text{ V}$ , $-I_C = 100\text{ mA}$	Current Gain Group -16 $h_{FE}$	100	-	250	-
		160	-	400	-
		250	-	600	-
at $-V_{CE} = 1\text{ V}$ , $-I_C = 500\text{ mA}$	$h_{FE}$	40	-	-	-
Collector Base Cutoff Current at $-V_{CB} = 20\text{ V}$	$-I_{CBO}$	-	-	100	nA
Emitter Base Cutoff Current at $-V_{EB} = 5\text{ V}$	$-I_{EBO}$	-	-	100	nA
Collector Emitter Saturation Voltage at $-I_C = 500\text{ mA}$ , $-I_B = 50\text{ mA}$	$-V_{CE(sat)}$	-	-	0.7	V
Base Emitter Voltage at $-I_C = 500\text{ mA}$ , $-V_{CE} = 1\text{ V}$	$-V_{BE(on)}$	-	-	1.2	V
Transition Frequency at $-V_{CE} = 5\text{ V}$ , $-I_C = 10\text{ mA}$ , $f = 50\text{ MHz}$	$f_T$	80	-	-	MHz
Collector Base Capacitance at $-V_{CB} = 10\text{ V}$ , $f = 1\text{ MHz}$	$C_{cbo}$	-	9	-	pF



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