



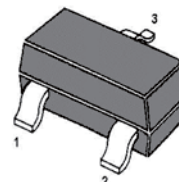
BC807 / BC808

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
SOT-23 Plastic Package

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 -25 -40	h_{FE}	100	-	250	-
		h_{FE}	160	-	400	-
		h_{FE}	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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