

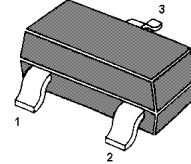
BC817 / BC818-AH

NPN Silicon Epitaxial Planar Transistors

for switching, AF driver and amplifier application,

Features

- These transistors are subdivided into three groups -16, -25, -40 according to their current gain.
- As complementary types, the PNP transistors
- BC807 and BC808 are recommended.
- AEC-Q101 Qualified and PPAP Capable
- Halogen and Antimony Free(HAF), RoHS compliant



1. Base 2. Emitter 3. Collector
TO-236 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	50	V
		30	
Collector Emitter Voltage	V_{CEO}	45	V
		25	
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 $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $V_{CE} = 1\text{ V}$, $I_C = 100\text{ mA}$ at $V_{CE} = 1\text{ V}$, $I_C = 500\text{ mA}$	Current Gain Group -16 h_{FE} -25 h_{FE} -40 h_{FE}	100	-	250	-
		160	-	400	-
		250	-	600	-
		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	100	-	-	MHz
Collector Base Capacitance at $V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	5	-	pF

