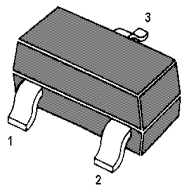
BC807 / BC808

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

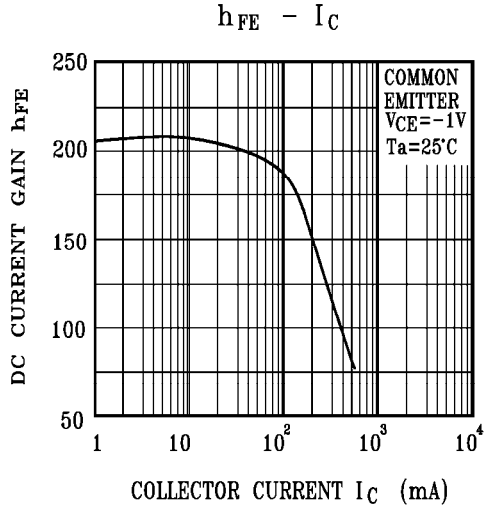
Absolute Maximum Ratings (T_a = 25 °C)

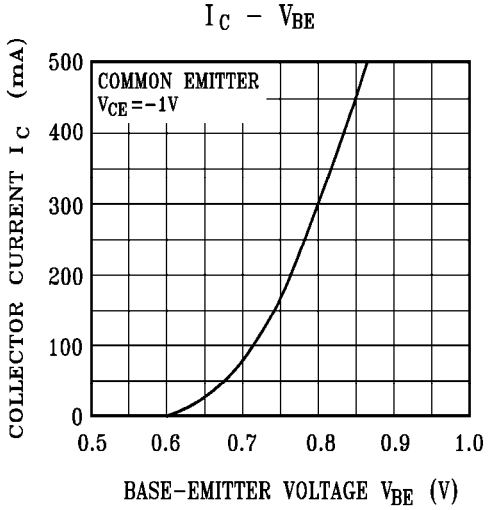
Parameter		Symbol	Value	Unit
Collector Base Voltage	BC807 BC808	$-V_{CBO}$	50 30	V
Collector Emitter Voltage	BC807 BC808	$-V_{CEO}$	45 25	V
Emitter Base Voltage		$-V_{EBO}$	5	V
Collector Current		$-I_C$	500	mA
Power Dissipation		P_{tot}	300	mW
Junction Temperature		T_j	150	°C
Storage Temperature Range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

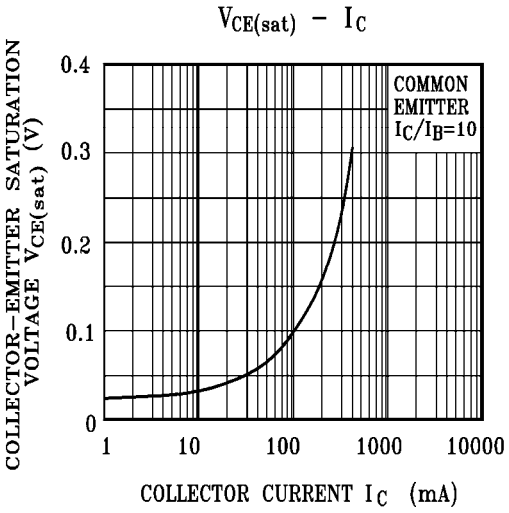
Electrical Characteristics at T_a = 25 °C

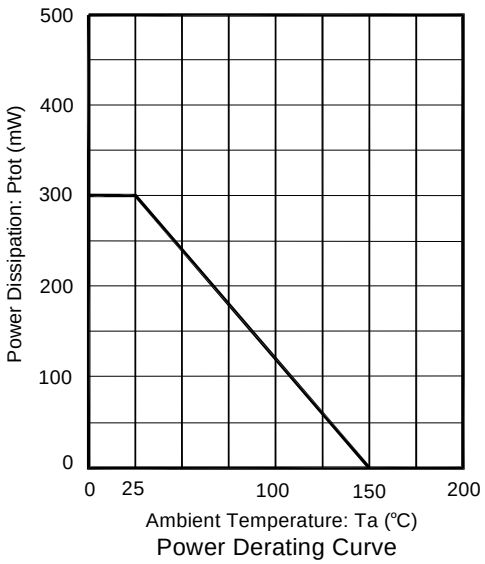
Parameter		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain						
at $-V_{CE}$ = 1 V, $-I_C$ = 100 mA	Current Gain Group -16	h_{FE}	100	-	250	-
	-25	h_{FE}	160	-	400	-
	-40	h_{FE}	250	-	600	-
at $-V_{CE}$ = 1 V, $-I_C$ = 500 mA		h_{FE}	40	-	-	-
Collector Base Cutoff Current at $-V_{CB}$ = 20 V		$-I_{CBO}$	-	-	100	nA
Emitter Base Cutoff Current at $-V_{EB}$ = 5 V		$-I_{EBO}$	-	-	100	nA
Collector Emitter Saturation Voltage at $-I_C$ = 500 mA, $-I_B$ = 50 mA		$-V_{CE(sat)}$	-	-	0.7	V
Base Emitter Voltage at $-I_C$ = 500 mA, $-V_{CE}$ = 1 V		$-V_{BE(on)}$	-	-	1.2	V
Transition Frequency at $-V_{CE}$ = 5 V, $-I_C$ = 10 mA, f = 50 MHz		f_T	80	-	-	MHz
Collector Base Capacitance at $-V_{CB}$ = 10 V, f = 1 MHz		C_{cbo}	-	9	-	pF

BC807 / BC808









Power Derating Curve

Note: Specifications are subject to change without notice. For more details and updates, please visit our website.