

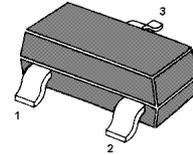
PNP Silicon Epitaxial Planar Transistors

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.



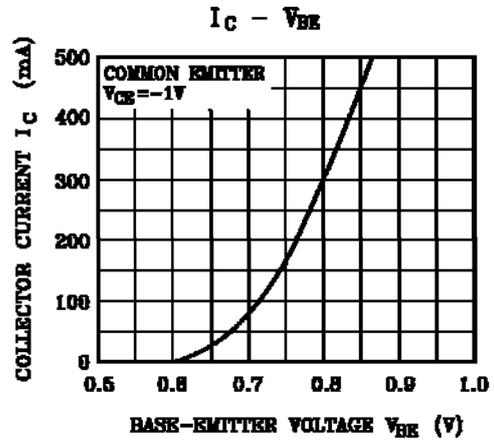
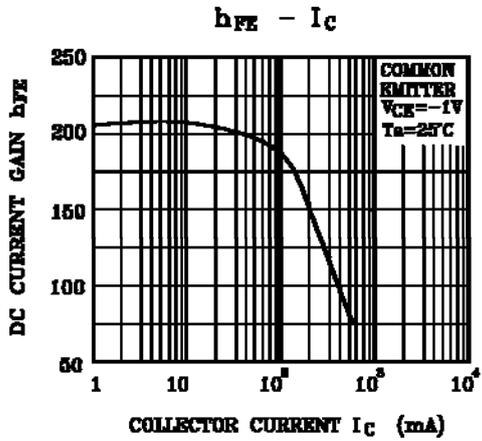
1.Base 2.Emitter 3.Collector
SOT-23 Plastic Package

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

Parameter	Symbol	Value	Unit	
Collector Base Voltage	BC807 BC808	-V _{CB0}	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}	200	mW
Thermal Resistance Junction to Ambient Air		R _{θJA}	500	K/W
Junction Temperature		T _J	150	°C
Storage Temperature Range		T _S	- 55 to + 150	°C

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

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 Saturation Voltage						
at -I _C = 500 mA, -I _B = 50 mA	-V _{CEsat}	-	-	0.7	V	
Base-Emitter Voltage						
at -I _C = 500 mA, -V _{CE} = 1 V	-V _{BE(on)}	-	-	1.2	V	
Gain -Bandwidth Product						
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 _{CB0}	-	9	-	pF	



Power Dissipation vs Ambient Temperature

