

SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	0.1 Typical	
K	2.20	2.60
All Dimensions in mm		

### FEATURES

- High collector current.
- High current gain.
- Low collector-emitter saturation voltage.
- Complementary types:BC818.

### ORDERING INFORMATION

Type No.	Marking	Package Code
BC808-16	5E	SOT-23
BC808-25	5F	SOT-23
BC808-40	5G	SOT-23

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

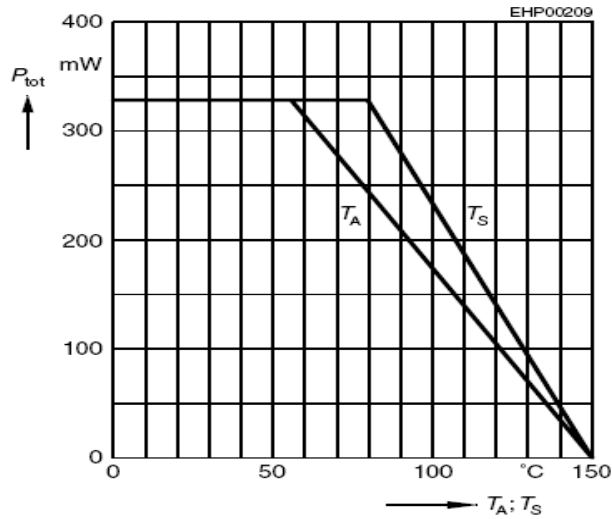
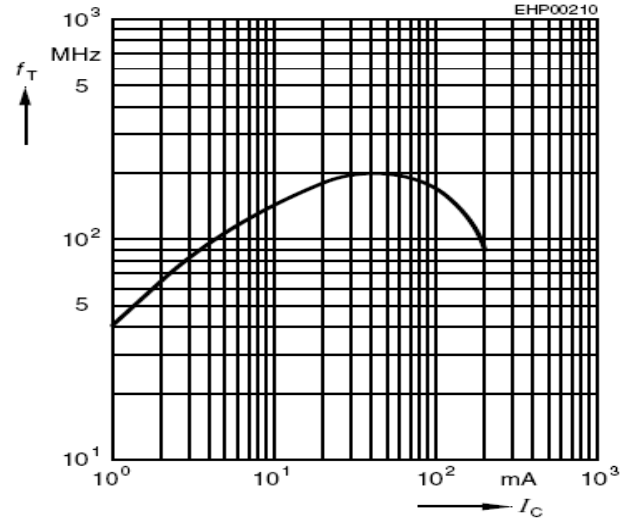
Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	-30	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-25	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current -Continuous	-500	mA
I <sub>CM</sub>	Peak collector current	-1	A
I <sub>B</sub>	Base current	-100	mA
I <sub>BM</sub>	Peak base current	-200	mA
P <sub>D</sub>	Total Device Dissipation	330	mW
R <sub>θJA</sub>	Thermal Resistance Junction to Ambient	417	°C/W
T <sub>J</sub> , T <sub>stg</sub>	Junction and Storage Temperature	-55 to +150	°C

### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> =-10μA I <sub>E</sub> =0	-30		V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =-10mA I <sub>B</sub> =0	-25		V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> =-10μA I <sub>C</sub> =0	-5		V
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> =-25V I <sub>E</sub> =0		-0.1	μ A
Emitter cut-off current	I <sub>EBO</sub>	V <sub>CE</sub> =-4V I <sub>C</sub> =0		-0.1	μ A
DC current gain	h <sub>FE</sub>	808-16	100	250	
		808-25	160	400	
		808-40	250	630	
DC current gain	h <sub>FE</sub>	808-16	60		
		808-25	100		
		808-40	170		
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-500mA I <sub>B</sub> =-50mA		-0.7	V
Base-emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =-500mA I <sub>B</sub> =-50mA		-1.2	V
Output capacitance	C <sub>obo</sub>	V <sub>CB</sub> =-10V, f=1.0MHz		10	pF
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =-5V, I <sub>C</sub> =-50mA f=100MHz		200	MHz

**TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**
**Total power dissipation  $P_{tot} = f(T_A^*; T_S)$** 

\* Package mounted on epoxy


**Transition frequency  $f_T = f(I_C)$** 
 $V_{CE} = 5V$ 


Device	Package	Shipping
BC808-16/-25/-40	SOT-23	3000/Tape&Reel