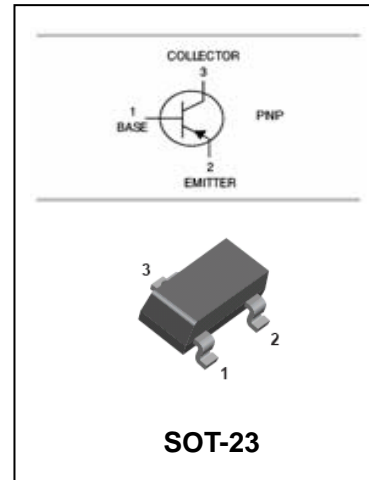


PNP General Purpose Amplifier

BC808-16/-25/-40

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_{CBO}	Collector-Base Voltage	-30	V
V_{CEO}	Collector-Emitter Voltage	-25	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-500	mA
I_{CM}	Peak collector current	-1	A
I_B	Base current	-100	mA
I_{BM}	Peak base current	-200	mA
P_D	Total Device Dissipation	330	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	417	°C/W
T_j, T_{stg}	Junction and Storage Temperature	-55 to +150	°C

PNP General Purpose Amplifier

BC808-16/-25/-40

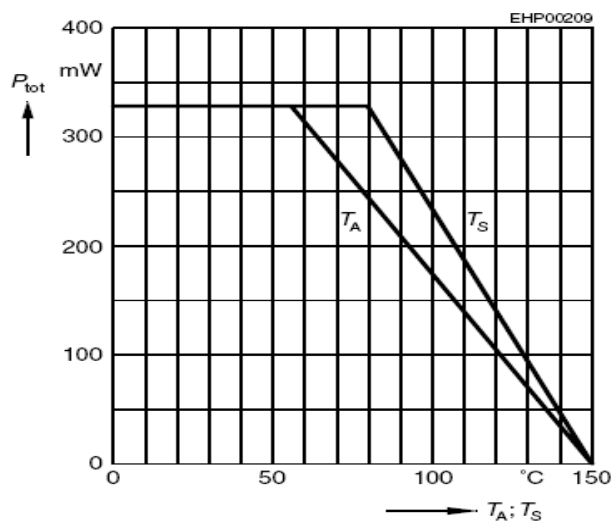
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	-30		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	-25		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB} = -25V, I_E = 0$		-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{CE} = -4V, I_C = 0$		-0.1	μA
DC current gain	h_{FE}	$V_{CE} = -1V, I_C = -100mA$	808-16	100	250
			808-25	160	400
			808-40	250	630
DC current gain	h_{FE}	$V_{CE} = -1V, I_C = -300mA$	808-16	60	
			808-25	100	
			808-40	170	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$		-0.7	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500mA, I_B = -50mA$		-1.2	V
Output capacitance	C_{obo}	$V_{CB} = -10V, f = 1.0MHz$		10	pF
Transition frequency	f_T	$V_{CE} = -5V, I_C = -50mA$ $f = 100MHz$		200	MHz

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

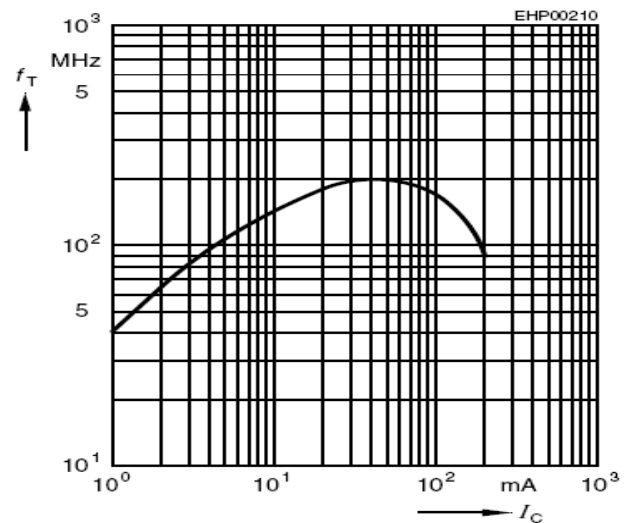
Total power dissipation $P_{tot} = f(T_A^*; T_S)$

* Package mounted on epoxy



Transition frequency $f_T = f(I_C)$

$V_{CE} = 5V$



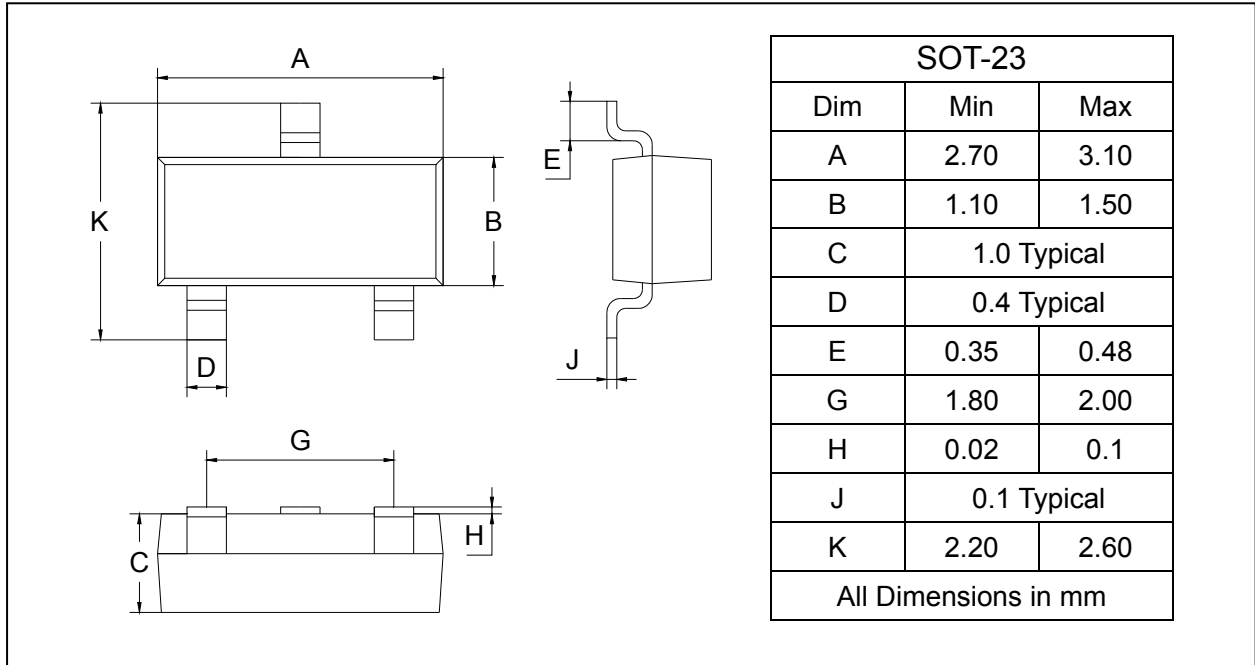
PNP General Purpose Amplifier

BC808-16/-25/-40

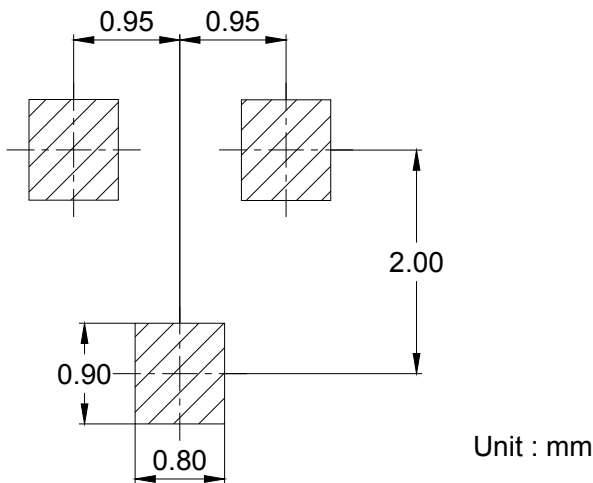
PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



PACKAGE INFORMATION

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