

## NPN General Purpose Amplifier

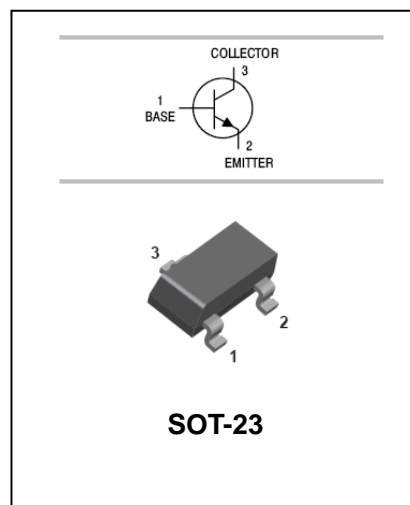
## BC818

### FEATURES

- For general AF application.
- Complementary PNP type available BC808.
- High collector current, high current gain.
- Low collector-emitter saturation voltage.



Lead-free



### APPLICATIONS

- General purpose medium power amplifier.

### ORDERING INFORMATION

Type No.	Marking	Package Code
BC818-16	6E	SOT-23
BC818-25	6F	SOT-23
BC818-40	6G	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
P <sub>C</sub>	Collector Dissipation	330	mW
T <sub>j</sub> , T <sub>stg</sub>	Junction and Storage Temperature	-65 to +150	°C



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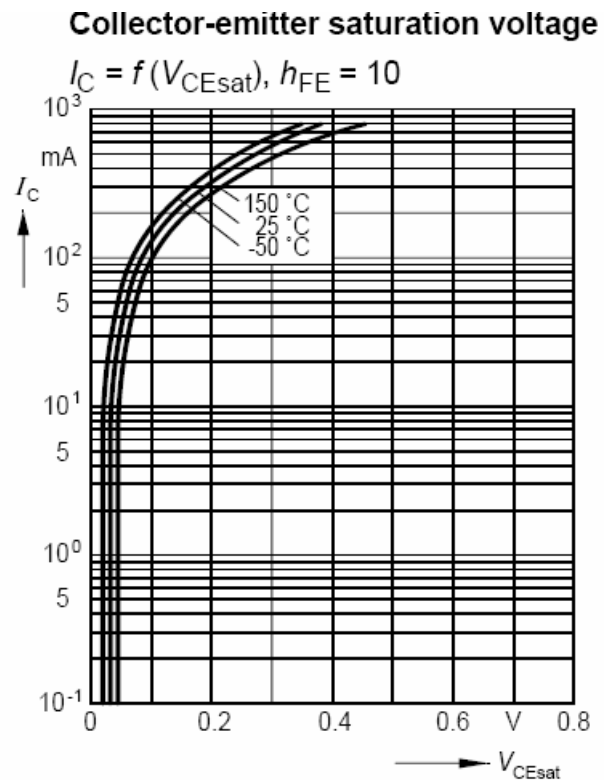
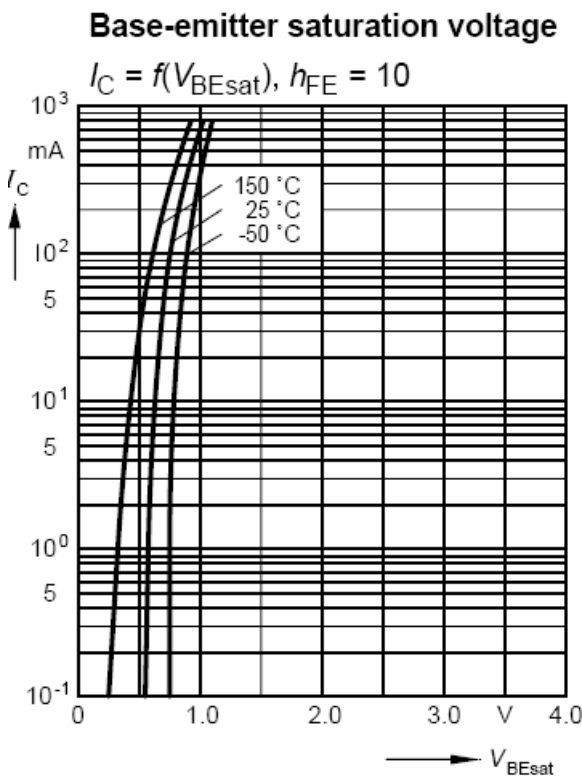
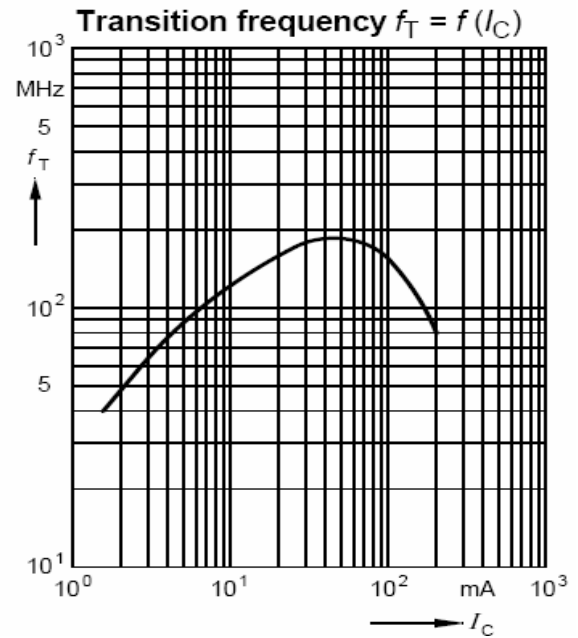
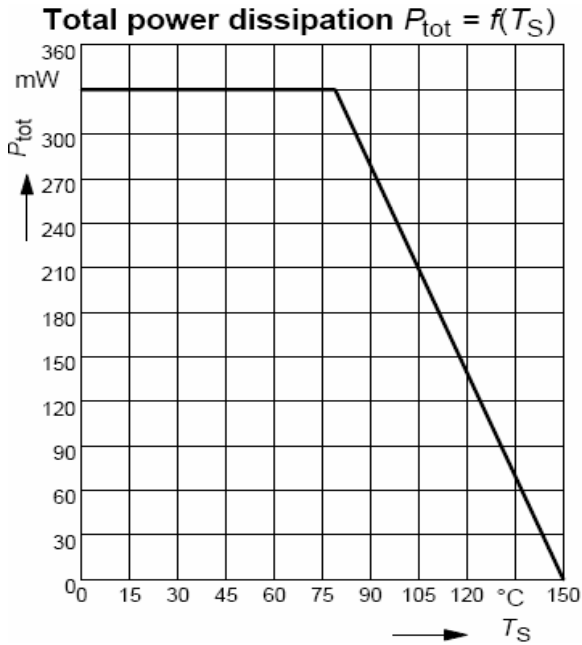
### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

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	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=4V$ $I_C=0$		0.1	$\mu A$
DC current gain					
818-16	$h_{FE}$	$V_{CE}=1V$ $I_C=100mA$	100	250	
818-25			160	400	
818-40			250	630	
DC current gain					
818-16	$h_{FE}$	$V_{CE}=1V$ $I_C=300mA$	60		
818-25			100		
818-40			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
Transition frequency	$f_T$	$V_{CE}=5V$ , $I_C=50mA$ $f=100MHz$	170		MHz

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TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified



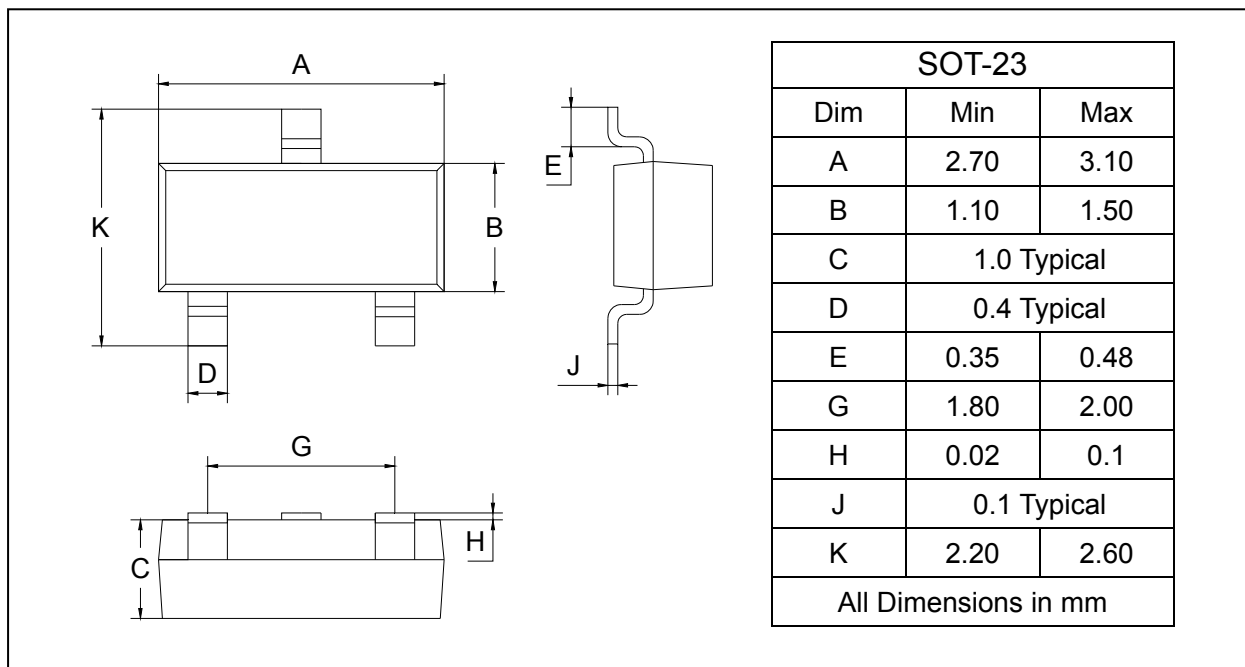
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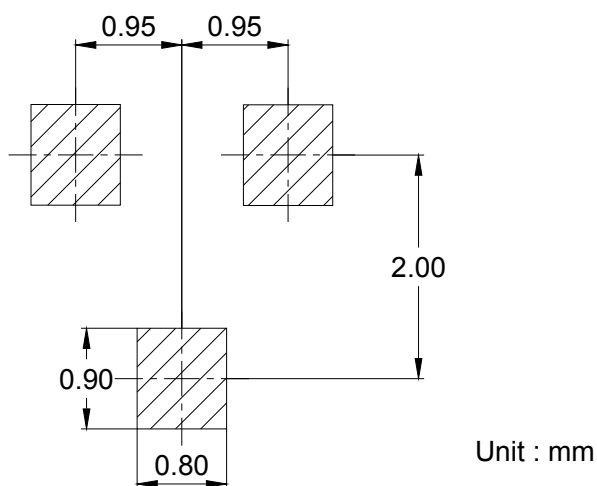
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
BC818	SOT-23	3000/Tape&Reel