



# BC808-16 THRU BC808-40

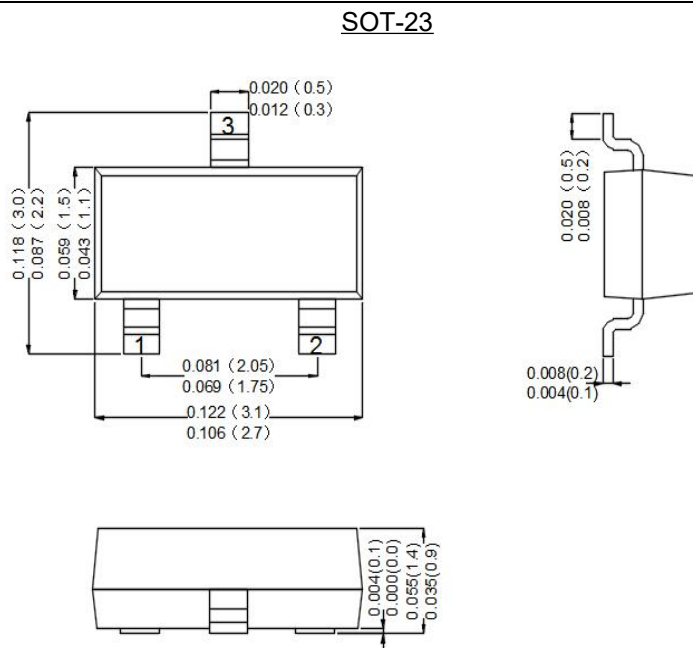
TRANSISTOR (PNP)

## Features

- Ideally Suited for Automatic Insertion
- Epitaxial Planar Die Construction
- For Switching, AF Driver and Amplifier Applications
- Complementary NPN Types Available (BC818)

## Mechanical Data

- Case: Molded Plastic, SOT-23
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Plated Leads Solderable per MIL-STD-750, Method-2026.
- Marking: BC808-16:5E; BC808-25:5F; BC808-40:5G
- Mounting Position : Any.
- Equivalent Circuit:



Dimensions in inches and (millimeters)

## Maximum Ratings Maximum Ratings (Rating at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Units
Collector-Base Voltage	$V_{CBO}$	-30	V
Collector-Emitter Voltage	$V_{CEO}$	-25	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current -Continuous	$I_C$	-0.5	A
Collector Power Dissipation	$P_C$	0.3	W
Junction Temperature	$T_J$	150	°C
Storage Temperature	$T_{stg}$	-55-150	°C



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## TRANSISTOR (PNP)

**Electrical Characteristics** (Rating at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{CBO}$	$I_C = -10\mu A, I_E = 0$	-30		V
Collector-emitter breakdown voltage	$V_{CEO}$	$I_C = -10mA, I_B = 0$	-25		V
Emitter-base breakdown voltage	$V_{EBO}$	$I_E = -1\mu A, I_C = 0$	-5		V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -45V, I_E = 0$		-0.1	$\mu A$
Collector cut-off current	$I_{CEO}$	$V_{CE} = -40V, I_B = 0$		-0.2	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -4V, I_C = 0$		-0.1	$\mu A$
DC current gain	$h_{FE(1)}$	$V_{CE} = -1V, I_C = -100mA$	100	250	
			160	400	
			250	600	
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	$f_T$	$V_{CE} = -5V, I_C = -10mA$ $f = 100MHz$	100		MHz



### Rating And Characteristic Curves

Fig. 1, Power Derating Curve

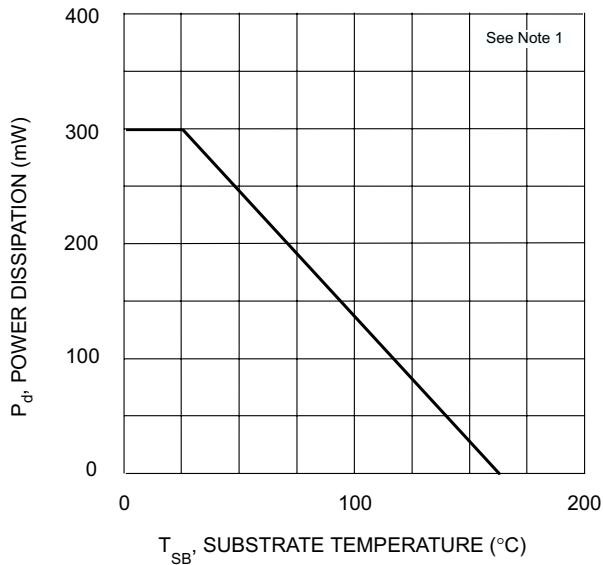


Fig. 2, Gain-Bandwidth Product vs Collector Current

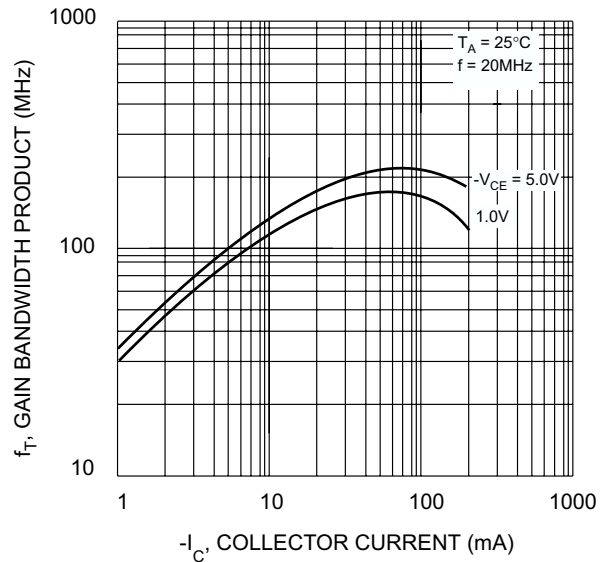


Fig. 3, Collector Sat. Voltage vs Collector Current

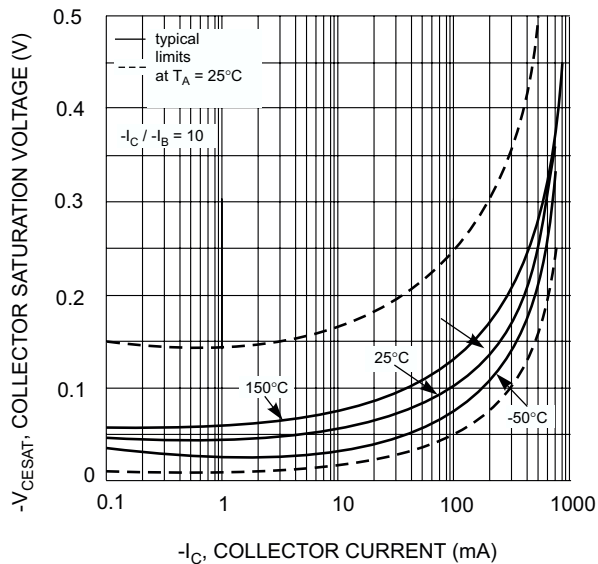


Fig. 4, DC Current Gain vs Collector Current

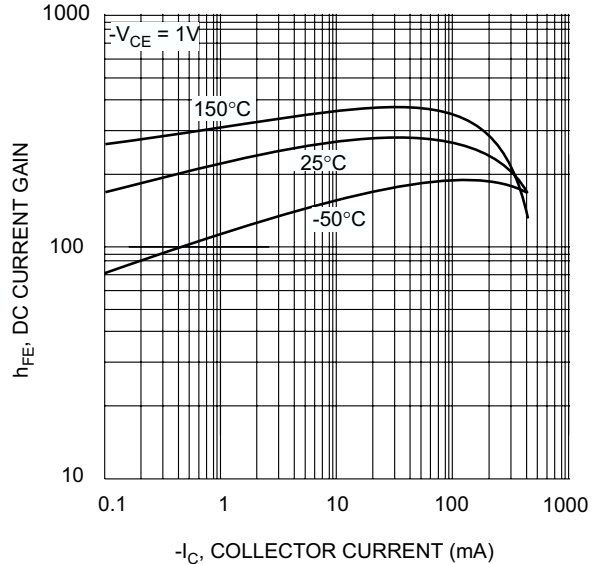


Fig. 5, Typical Emitter-Collector Characteristics

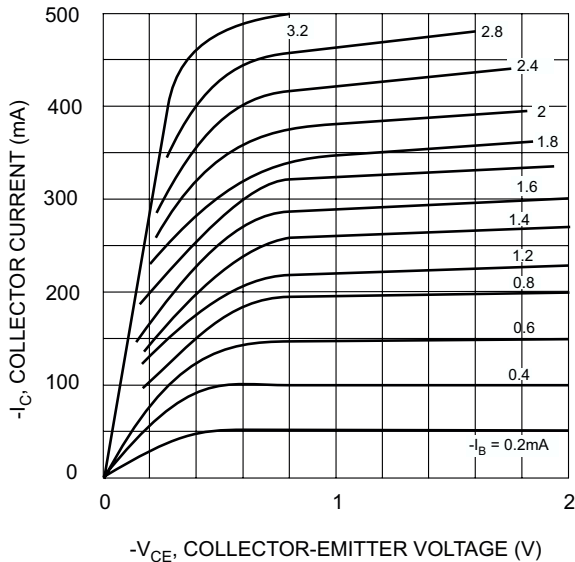
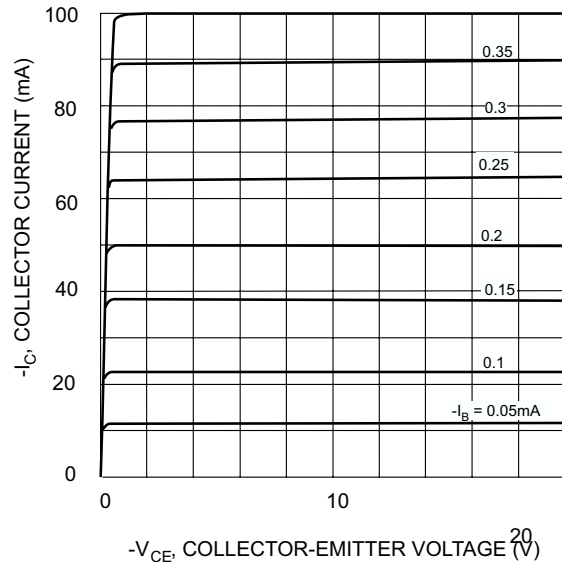


Fig. 6, Typical Emitter-Collector Characteristics





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