

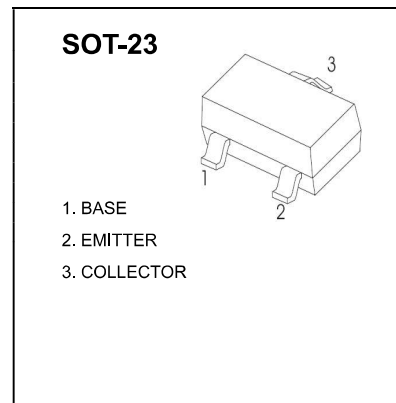


SOT-23 Plastic-Encapsulate Transistors

BC807 TRANSISTOR (PNP)

FEATURE

- Ideally suited for automatic insertion
- Epitaxial planar die construction
- Complementary NPN type available(BC817)



MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-45	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-0.5	A
P_C	Collector Power Dissipation	0.3	W
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55-150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C = -10\mu\text{A}, I_E = 0$	-50		V
Collector-emitter breakdown voltage	V_{CEO}	$I_C = -10\text{mA}, I_B = 0$	-45		V
Emitter-base breakdown voltage	V_{EBO}	$I_E = -1\mu\text{A}, I_C = 0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB} = -45\text{V}, I_E = 0$		-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = -40\text{V}, I_B = 0$		-0.2	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4\text{V}, I_C = 0$		-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$	100	600	
	$h_{FE(2)}$	$V_{CE} = -1\text{V}, I_C = -500\text{mA}$	40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$		-0.7	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$		-1.2	V
Transition frequency	f_T	$V_{CE} = -5\text{V}, I_C = -10\text{mA}$ $f = 100\text{MHz}$	100		MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	BC807-16	BC807-25	BC807-40
Range	100-250	160-400	250-600
Marking	5A	5B	5C

Typical Characteristics

BC807

