



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-23 Plastic-Encapsulate Transistors

BC807-16LT1 TRANSISTOR (PNP)

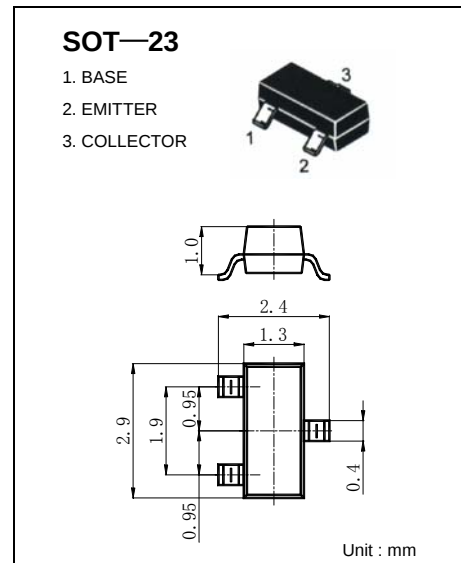
BC807-25LT1

BC807-40LT1

FEATURES

- Ideally suited for automatic insertion
- epitaxial planar die construction
- complementary NPN type available(BC817)

MARKING: 16LT1:5A; 25LT1:5B; 40LT1:5C



MAXIMUM RATINGS* $T_A=25^{\circ}\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
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 Dissipation	0.3	W
T_J, T_{stg}	Junction and Storage Temperature	-55-150	$^{\circ}\text{C}$

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

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	V_{CBO}	$I_C = -10 \mu A, I_E = 0$	-50		V
Collector-emitter breakdown voltage	V_{CEO}	$I_C = -10 mA, I_B = 0$	-45		V
Emitter-base breakdown voltage	V_{EBO}	$I_E = -1 \mu A, I_C = 0$	-5		V
Collector cut-off current	I_{CBO}	$V_{CB} = -45 V, I_E = 0$		-0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = -40 V, I_B = 0$		-0.2	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4 V, I_C = 0$		-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -1V, I_C = -100mA$	100 160 250	250 400 600	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50 mA$		-0.7	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500 mA, I_B = -50mA$		-1.2	V
Transition frequency	f_T	$V_{CE} = -5 V, I_C = -10mA$ $f=100MHz$	100		MHz

Typical Characteristics

BC807-16LT1

BC807-25LT1

BC807-40LT1

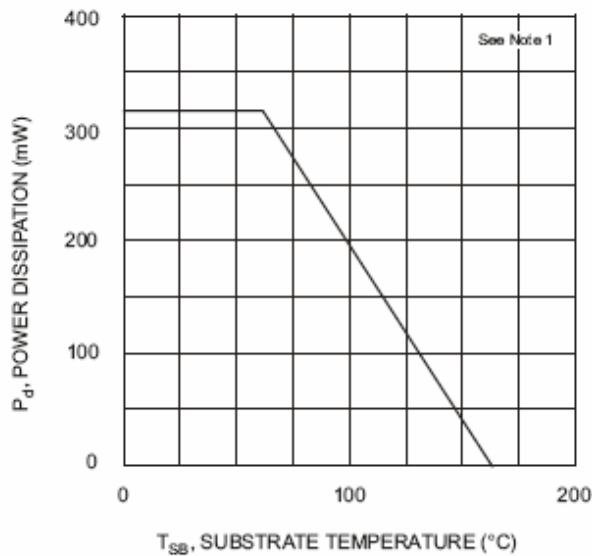


Fig. 1, Power Derating Curve

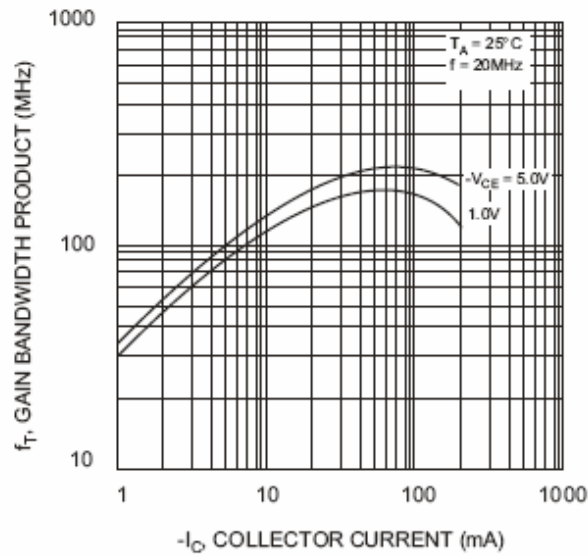


Fig. 2, Gain-Bandwidth Product vs Collector Current

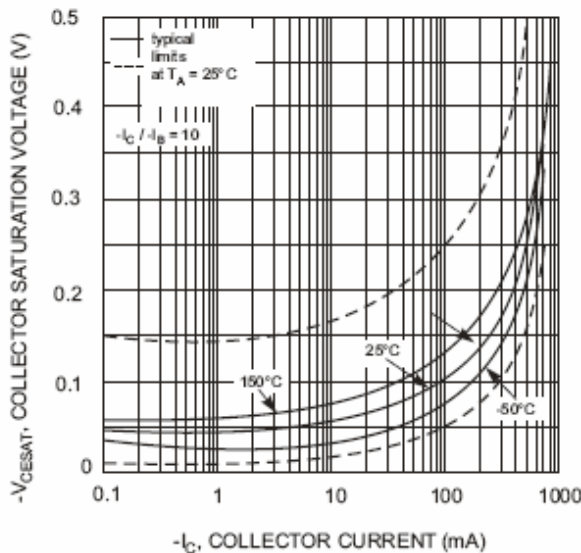


Fig. 3, Collector Sat Voltage vs Collector Current

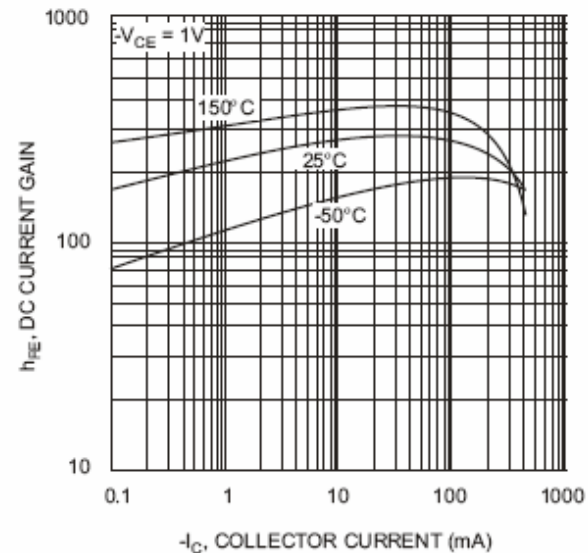


Fig. 4, DC Current Gain vs Collector Current

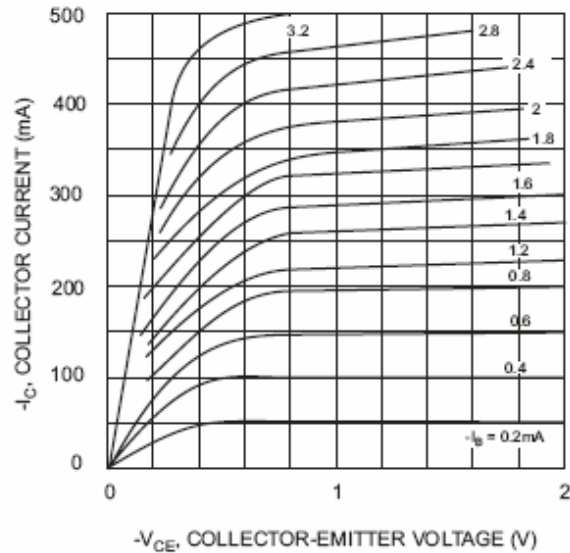


Fig. 5, Typical Emitter-Collector Characteristics

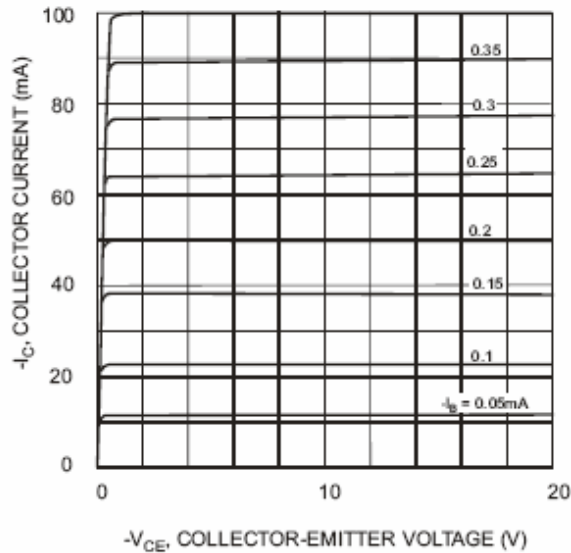


Fig. 6, Typical Emitter-Collector Characteristics