

FEATURES

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

BC807-16 (PNP)
BC807-25 (PNP)
BC807-40 (PNP)
Marking

BC807-16	BC807-25	BC807-40
5A	5B	5C

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-45	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current -Continuous	I_C	-500	mA
Collector Power Dissipation	PC	300	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C
Thermal Resistance Junction to Ambient	R_{JA}	417	°C/W


ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	VCBO	IC= -10μA, IE=0	-50		V
Collector-emitter breakdown voltage	VCEO	IC= -10mA, IB=0	-45		V
Emitter-base breakdown voltage	VEBO	IE= -1μA, IC=0	-5		V
Collector cut-off current	ICBO	VCE= -45V, IE=0		-0.1	u A
Collector cut-off current	ICEO	VCE= -40V, IB=0		-0.2	u A
Emitter cut-off current	IEBO	VEB= -4 V, IC=0		-0.1	u A
DC current gain	hFE	VCE= -1V, IC= -100mA	100	250	
			160	400	
			250	600	
Collector-emitter saturation voltage	VCE(sat)	IC=-500mA, IB= -50mA		-0.7	V
Base-emitter saturation voltage	VBE(sat)	IC= -500mA, IB= -50mA		-1.2	V
Transition frequency	fT	VCE= -5V, IC= -10mA f=100MHz	100		MHz
collector capacitance	Cc	IE = 0; VCB = -10 V f = 1 MHz		9	PF

BC807-16
BC807-25 Typical Characteristics
BC807-40

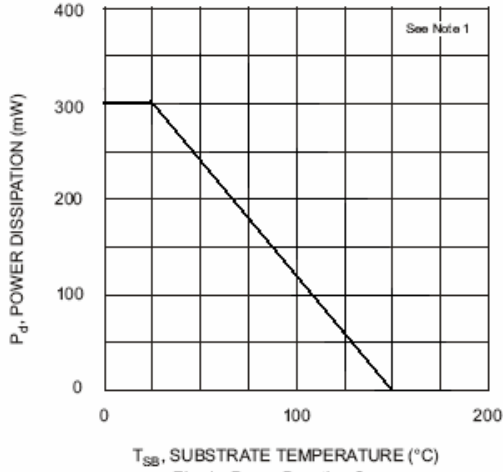


Fig. 1, Power Derating Curve

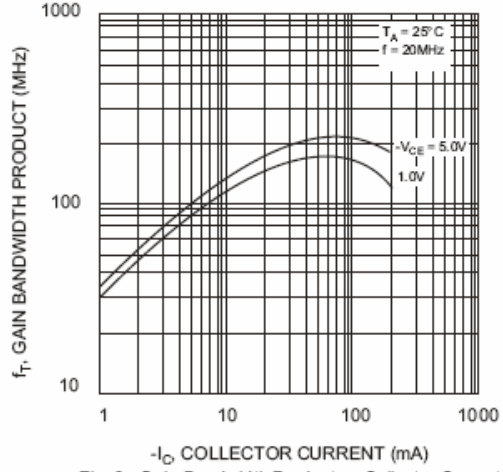


Fig. 2, Gain-Bandwidth Product vs Collector Current

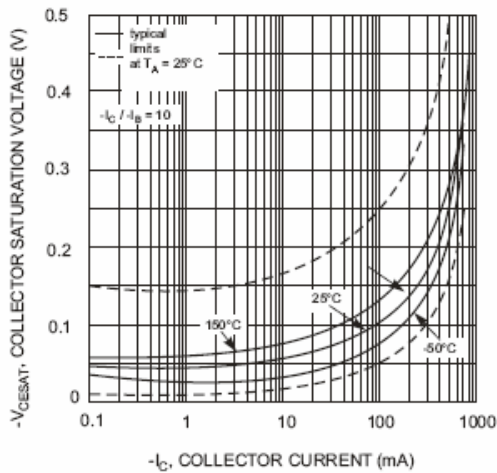


Fig. 3, Collector Sat Voltage vs Collector Current

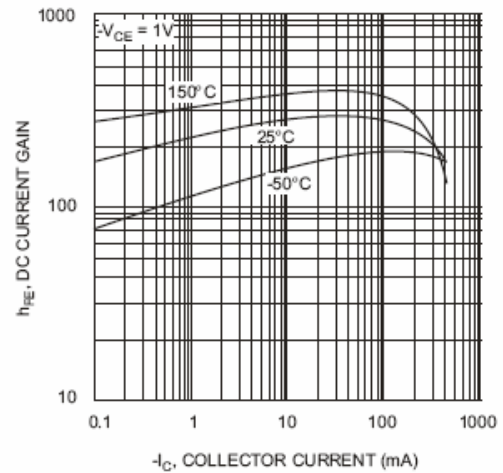


Fig. 4, DC Current Gain vs Collector Current

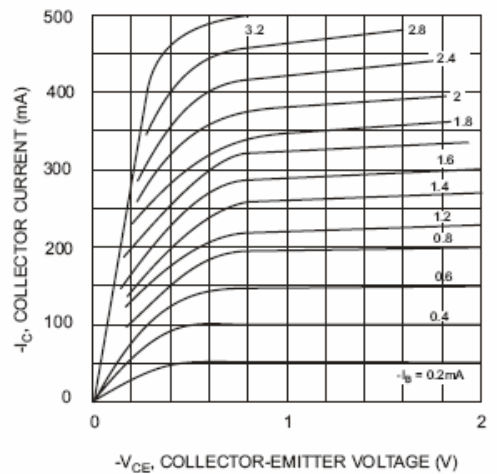


Fig. 5, Typical Emitter-Collector Characteristics

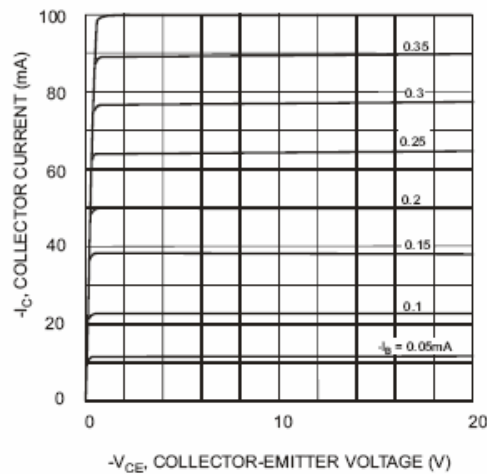


Fig. 6, Typical Emitter-Collector Characteristics