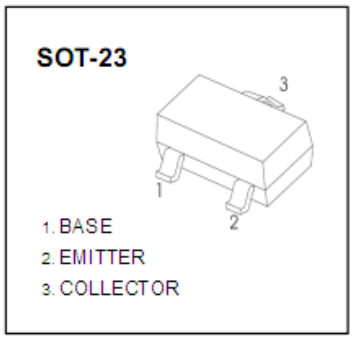
SLS SEMICONDUCTOR (SHENZHEN) CO.,LTD.

SOT-23 封装半导体晶体管/SOT-23 Plastic-Encapsulate Transistors

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

特点/Features：

I_C 大，电流增益大；



用途/Applications：

用于一般功率放大电路及开关，与 BC817 互补。

极限参数/Absolute maximum ratings(Ta=25℃)

参数/Parameter	符号/ Symbol	数值/Value	单位/Unit
集电极-基极电压/Collector-Base Voltage	V_{CBO}	-50	V
集电极-发射极电压/Collector-Emitter Voltage	V_{CEO}	-45	V
发射极-基极电压/Emitter-Base Voltage	V_{EBO}	-5	V
集电极连续电流/Collector Current Continuous	I_C	-0.5	A
集电极耗散功率/Collector Power Dissipation	P_C	0.3	W
结温/Junction Temperature	T_j	150	℃
储存温度/Storage Temperature	T_{stg}	-55～150	℃

电性能参数/Electrical characteristics (Ta=25℃)

参数	符号	测试条件	最小值	最大值	单位
集电极-基极击穿电压	$V_{BR(CBO)}$	I_C=-10μA, I_E=0	-50		V
集电极-发射极击穿电压	$V_{BR(CEO)}$	I_C=-10mA, I_B=0	-45		V
发射极-基极击穿电压	$V_{BR(EBO)}$	I_E=-1μA, I_C=0	-5		V
集电极截止电流	I_{CBO}	V_{CB}=-45V, I_E=0		-0.1	μA
发射极截止电流	I_{EBO}	V_{EB}=-4V, I_C=0		-0.1	μA
集电极发射极穿透电流	I_{CEO}	V_{CE}=-40V, I_B=0		-0.2	μA
直流电流增益	h_{FE}	V_{CE}=-1V, I_C=-100mA	100	600	
集电极-发射极饱和压降	$V_{CE(sat)}$	I_C=-500mA, I_B=-50mA		-0.7	V
基极-发射极饱和压降	$V_{BE(sat)}$	I_C=-500mA, I_B=-50mA		-1.2	V
特征频率	f_T	V_{CE}=-5V, I_C=-10mA, f=100MHz	100		MHz
输出电容	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz		5	pF

h_{FE} 分档/Classification of h_{FE}

档位/Rank	16	25	40
范围/Range	100～250	160～400	250～600
印章/Marking	5A	5B	5C

典型特性曲线图/Typical Characteristics

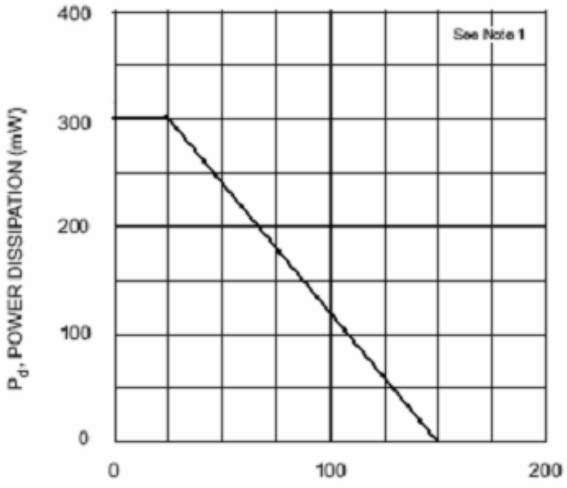


Fig. 1, Power Derating Curve

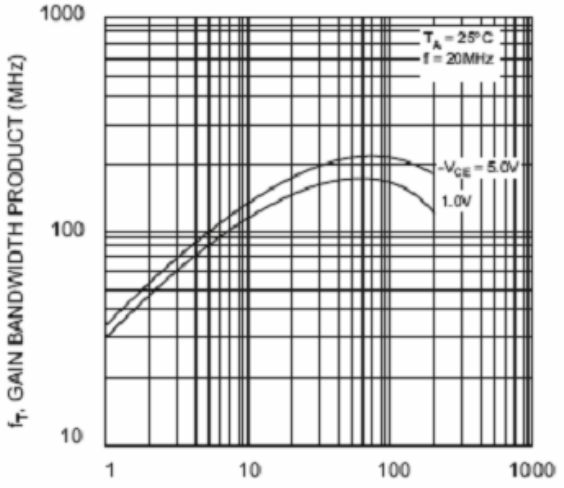


Fig. 2, Gain-Bandwidth Product vs Collector Current

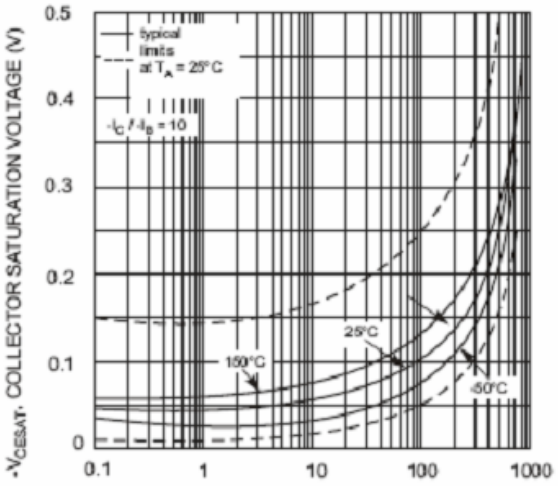


Fig. 3, Collector Sat. Voltage vs Collector Current

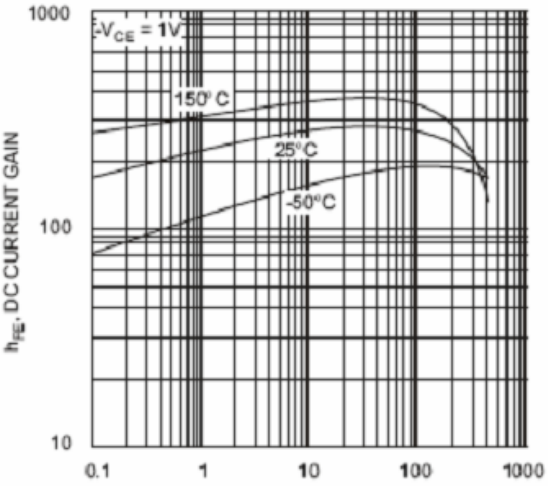


Fig. 4, DC Current Gain vs Collector Current

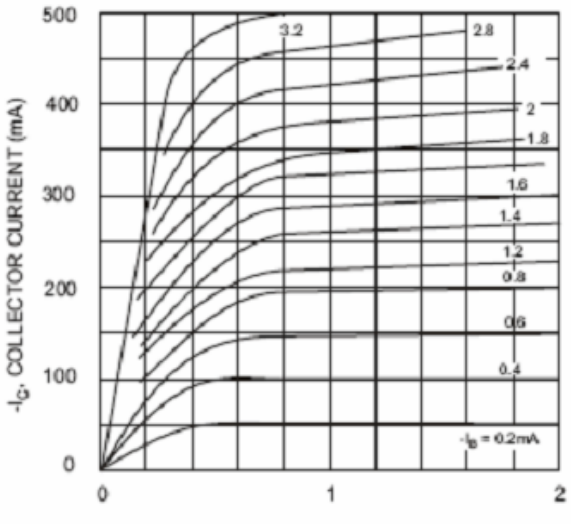


Fig. 5, Typical Emitter-Collector Characteristics

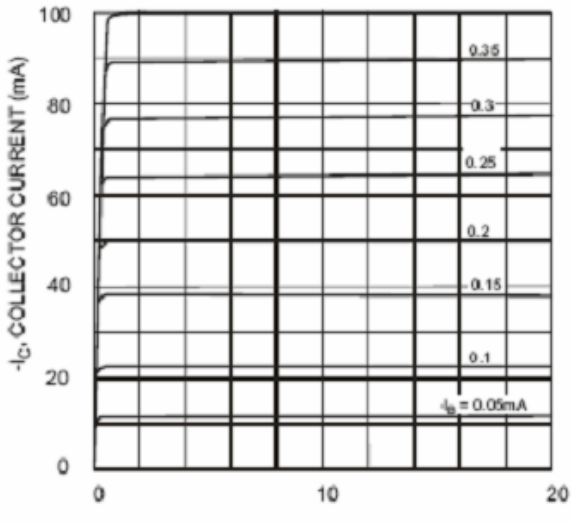


Fig. 6, Typical Emitter-Collector Characteristics