



SLS SEMICONDUCTOR (SHENZHEN) CO.,LTD.

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

C1815 (NPN)

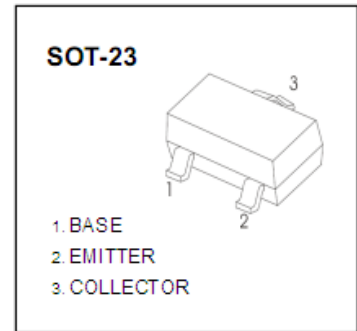
印章/Marking : HF

特点/Features :

h_{FE} 线性特性好 ,
 $h_{FE} (0.1mA) / h_{FE} (2mA) = 0.95(TYP) ;$

用途/Applications :

功率电路 , 与 A1015 互补。



极限参数/Absolute maximum ratings($T_a = 25^\circ C$)

参数/Parameter	符号/ Symbol	数值/Value	单位/Unit
集电极-基极电压/Collector-Base Voltage	V_{CB0}	60	V
集电极-发射极电压/Collector-Emitter Voltage	V_{CE0}	50	V
发射极-基极电压/Emitter-Base Voltage	V_{EB0}	5	V
集电极连续电流/Collector Current Continuous	I_C	0.15	A
集电极耗散功率/Collector Power Dissipation	P_C	0.2	W
结温/Junction Temperature	T_j	150	$^\circ C$
储存温度/Storage Temperature	T_{stg}	-55~150	$^\circ C$

电性能参数/Electrical characteristics ($T_a = 25^\circ C$)

参数	符号	测试条件	最小值	典型值	最大值	单位
集电极-基极击穿电压	$V_{BR(CB0)}$	$I_C = 100 \mu A, I_E = 0$	60			V
集电极-发射极击穿电压	$V_{BR(CE0)}$	$I_C = 100 \mu A, I_B = 0$	50			V
发射极-基极击穿电压	$V_{BR(EB0)}$	$I_E = 100 \mu A, I_C = 0$	5			V
集电极截止电流	I_{CB0}	$V_{CB} = 60V, I_E = 0$			0.1	μA
发射极截止电流	I_{EB0}	$V_{EB} = 3V, I_C = 0$			0.1	μA
集电极发射极穿透电流	I_{CE0}	$V_{CE} = 50V, I_B = 0$			0.1	μA
直流电流增益	h_{FE}	$V_{CE} = 6V, I_C = 2mA$	130		400	
集电极-发射极饱和压降	$V_{CE(sat)}$	$I_C = 100mA, I_B = 10mA$			0.25	V
基极-发射极饱和压降	$V_{BE(sat)}$	$I_C = 100mA, I_B = 10mA$			1	V
特征频率	f_T	$V_{CE} = 10V, I_C = 1mA, f = 30MHz$	80			MHz

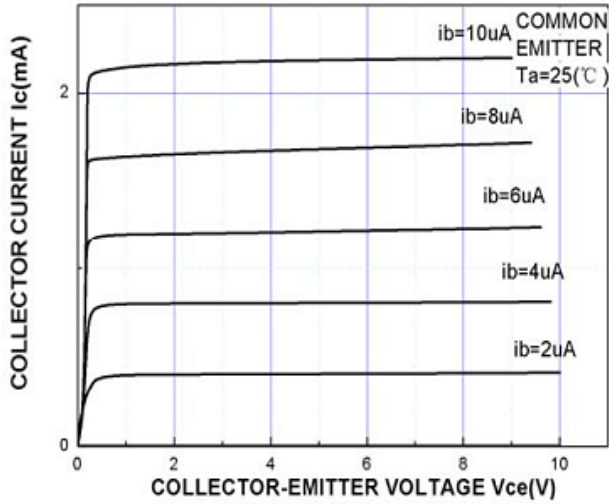
h_{FE} 分档/Classification of h_{FE}

档位/Rank	L	H
范围/Range	130~200	200~400

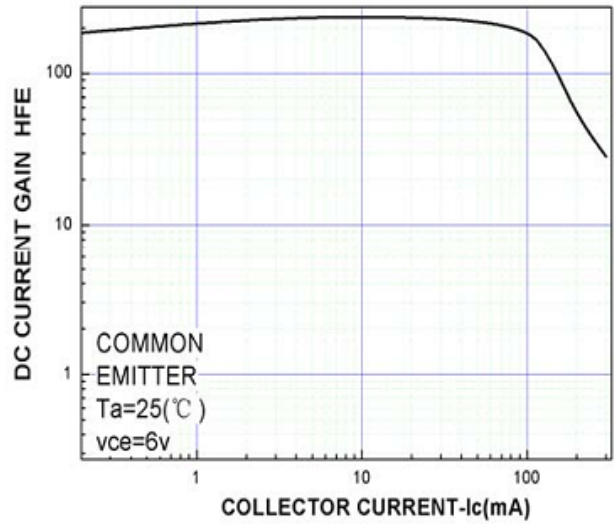


典型特性曲线图/Typical Characteristics

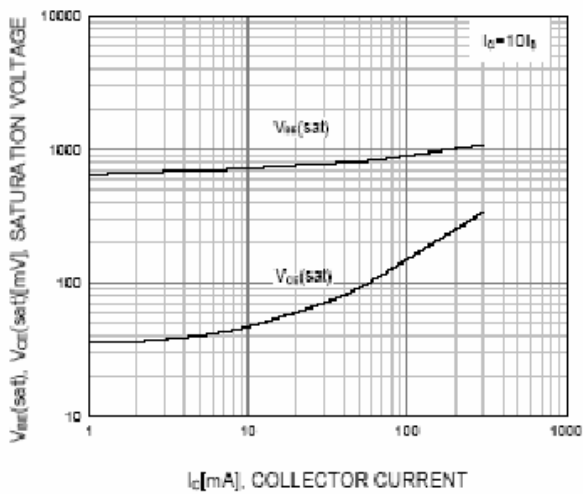
Ic-Vce



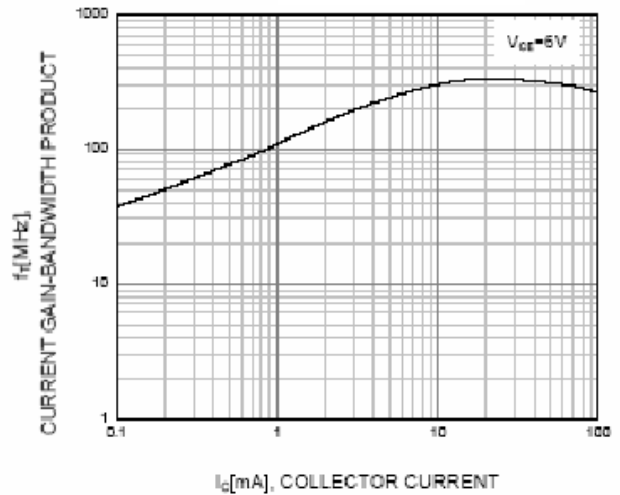
hFE-Ic



$V_{CE(sat)}/V_{BE(sat)}-I_c$



f_T-I_c



Pc-Ta

