



SLS SEMICONDUCTOR (SHENZHEN) CO.,LTD.

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

## C945 ( NPN )

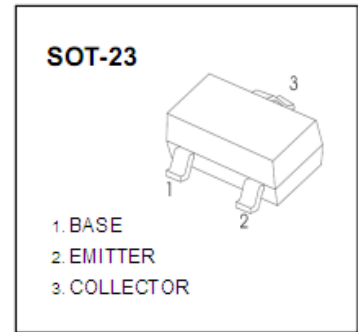
印章/Marking: CR •

特点/Features :

- 1、 $h_{FE}$  线性特性好;
- 2、低噪声;

用途/Applications :

用于一般放大，与 A733 互补。



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

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	$^{\circ}\text{C}$
储存温度/Storage Temperature	$T_{stg}$	-55~150	$^{\circ}\text{C}$

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

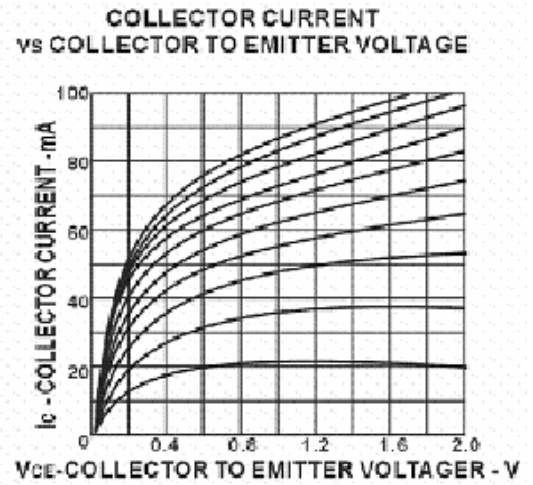
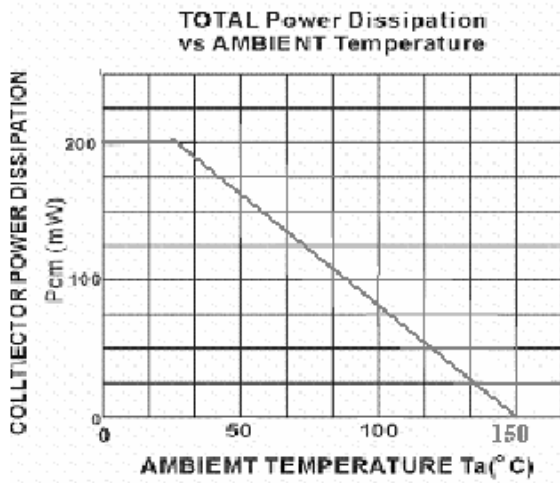
参数	符号	测试条件	最小值	典型值	最大值	单位
集电极-基极击穿电压	$V_{BR(CB0)}$	$I_C=100\ \mu\text{A}, I_E=0$	60			V
集电极-发射极击穿电压	$V_{BR(CE0)}$	$I_C=1\text{mA}, I_B=0$	50			V
发射极-基极击穿电压	$V_{BR(EB0)}$	$I_E=100\ \mu\text{A}, I_C=0$	5			V
集电极截止电流	$I_{CB0}$	$V_{CB}=60\text{V}, I_E=0$			0.1	$\mu\text{A}$
发射极截止电流	$I_{EB0}$	$V_{EB}=5\text{V}, I_C=0$			0.1	$\mu\text{A}$
集电极截止电流	$I_{CER}$	$V_{CE}=55\text{V}, R=10\text{M}\Omega$			0.1	$\mu\text{A}$
直流电流增益	$h_{FE(1)}$	$V_{CE}=6\text{V}, I_C=1\text{mA}$	130		400	
直流电流增益	$h_{FE(2)}$	$V_{CE}=6\text{V}, I_C=0.1\text{mA}$	40			
集电极-发射极饱和压降	$V_{CE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$			0.3	V
基极-发射极饱和压降	$V_{BE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$			1	V
特征频率	$f_T$	$V_{CE}=6\text{V}, I_C=10\text{mA}, f=30\text{MHz}$		150		MHz
输出电容	$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$			3	pF

$h_{FE}$  分档/Classification of  $h_{FE}$

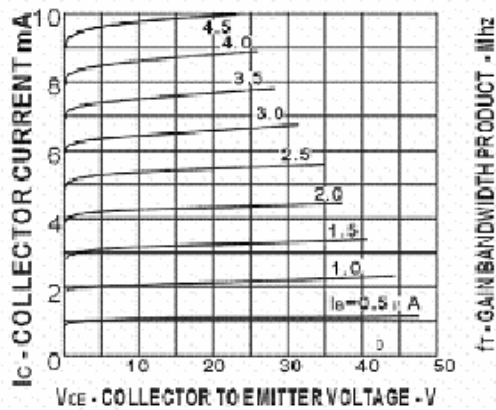
档位/Rank	L	H
范围/Range	130~200	200~400



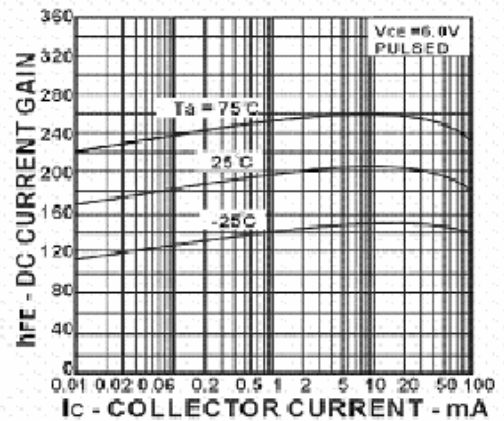
### 典型特性曲线图/Typical Characteristics



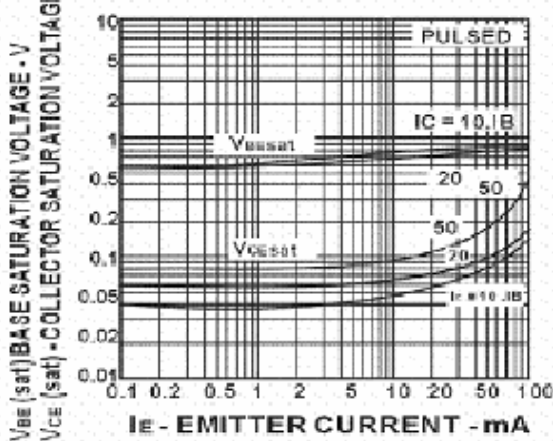
**COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE**



**DC CURRENT GAIN vs. COLLECTOR CURRENT**



**COLLECTOR AND BASE SATURATION VOLTAGE vs. COLLECTOR CURRENT**



**DC CURRENT GAIN vs. COLLECTOR CURRENT**

