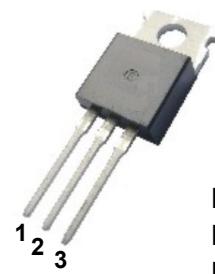


**描述 / Descriptions**

TO-220 塑封封装 NPN 半导体三极管。  
 Silicon NPN transistor in a TO-220 Plastic Package.

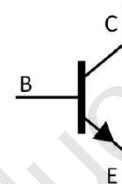

**特征 / Features**

宽阔的安全工作区,于 2SA940 互补。  
 Wide Safe Operating Area, complementary to 2SA940.

PIN1 : Base  
 PIN 2 : Collector  
 PIN 3 : Emitter

**用途 / Applications**

用于功率放大和帧频输出。  
 Power amplifier applications, vertical output applications.

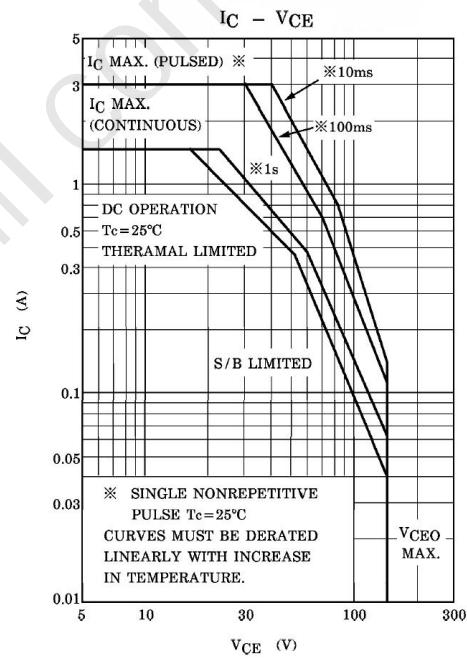
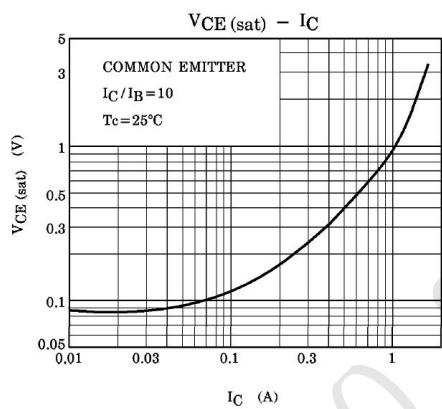
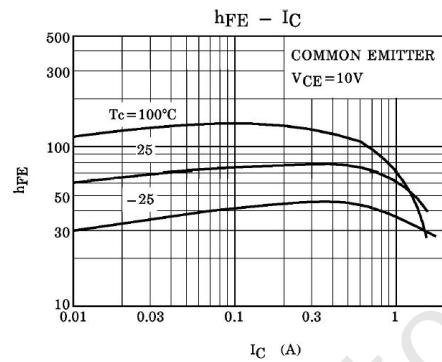
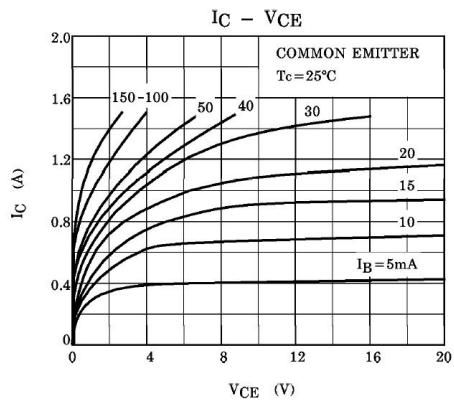

**极限参数 / Absolute Maximum Ratings(Ta=25°C)**

参数 Parameter	符号 Symbol	数值 Rating	单位 Unit
Collector to Base Voltage	$V_{CBO}$	150	V
Collector to Emitter Voltage	$V_{CEO}$	150	V
Emitter to Base Voltage	$V_{EBO}$	5.0	V
Collector Current - Continuous	$I_C$	1.5	A
Base Current - Continuous	$I_B$	0.5	A
Collector Power Dissipation	$P_C$	2.0	W
	$P_C(T_c=25^\circ\text{C})$	25	W
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55~150	°C

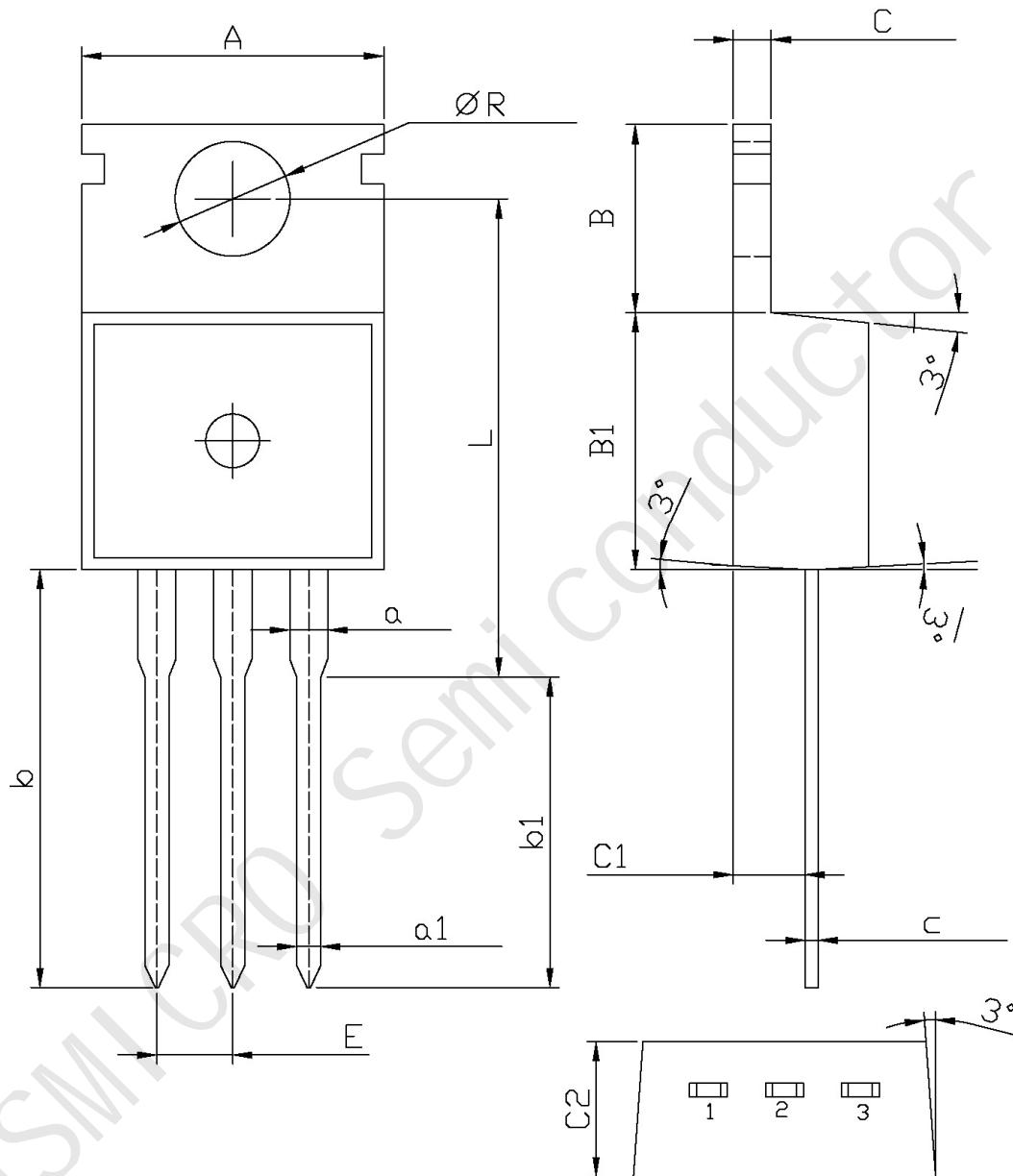
**电性能参数 / Electrical Characteristics(Ta=25°C)**

参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=120\text{V}$ $I_E=0$			10	$\mu\text{A}$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=5.0\text{V}$ $I_C=0$			10	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE}=10\text{V}$ $I_C=500\text{mA}$	40	75	140	
Collector to Emitter Saturation Voltage	$V_{CE(\text{sat})}$	$I_C=500\text{mA}$ $I_B=50\text{mA}$			1.5	V
Base to Emitter Voltage	$V_{BE}$	$V_{CE}=10\text{V}$ $I_C=500\text{mA}$	0.65	0.75	0.85	V
Transition Frequency	$f_T$	$V_{CE}=10\text{V}$ $I_C=500\text{mA}$		4.0		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=10\text{V}$ $I_E=0$ $f=1.0\text{MHz}$		35		pF

## 电参数曲线图 / Electrical Characteristic Curve



## 外形尺寸图 / Package Dimensions



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	9.8	10.2	C	1.2	1.4
R	3.56	3.64	B	6.3	6.7
L	15.7	16.1	B1	9.0	9.4
b	12.6	13.6	C1	2.2	2.6
b1	9.6	10.6	a1	0.7	0.9
a	1.22	1.32	c	0.4	0.6
E	2.34	2.74	C2	4.3	4.7