描述 / Descriptions

TO-126F 塑封封装 NPN 半导体三极管。Silicon NPN transistor in a TO-126F Plastic Package.

特征 / Features

可与 KSA1220(A)互补。

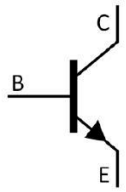
Complementary pair with KSA1220(A).

用途 / Applications

用于音频、高频功率放大。

Audio frequency and high frequency power amplifier.

内部等效电路 / Equivalent Circuit



引脚排列 / Pinning



PIN1：Emitter　　PIN 2：Collector　　PIN 3：Base

放大及印章代码 / h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	R	O	Y
h_{FE} Range	60～120	100～200	160～320

极限参数 / Absolute Maximum Ratings(Ta=25℃)

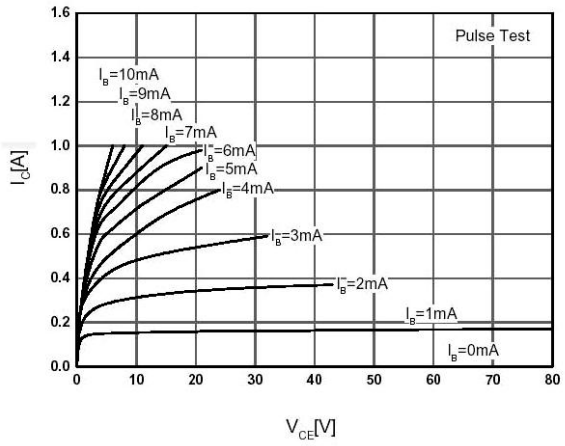
参数 Parameter	符号 Symbol		数值 Rating	单位 Unit
Collector to Base Voltage	V_{CBO}	KSC2690	120	V
		KSC2690A	160	
Collector to Emitter Voltage	V_{CEO}	KSC2690	120	V
		KSC2690A	160	
Emitter to Base Voltage	V_{EBO}		5.0	V
Collector Current - Continuous	I_C		1.2	A
Peak Collector Current – Continuous	I_{CM}		2.5	A
Collector Power Dissipation	P_C		1.2	W
Collector Power Dissipation	P_C(Tc=25℃)		20	W
Junction Temperature	T_j		150	℃
Storage Temperature Range	T_{stg}		-55～150	℃

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

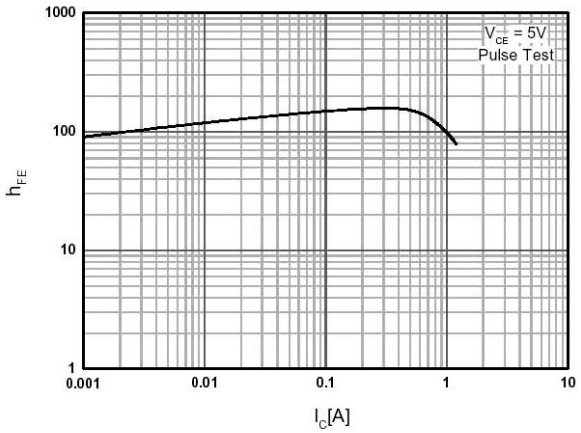
参数 Parameter	符号 Symbol	测试条件 Test Conditions	最小值 Min	典型值 Typ	最大值 Max	单位 Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=120V I_E=0			1.0	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=3.0V I_C=0			1.0	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=5.0V I_C=0.3A	60	140	320	
	$h_{FE(2)}$	V_{CE}=5.0V I_C=5.0mA	35	105		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=1.0A I_B=0.2A		0.4	0.7	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=1.0A I_B=0.2A		1.0	1.3	V
Transition Frequency	f_T	V_{CE}=5.0V I_C=0.2A		155		MHz
Collector output capacitance	Cob	V_{CB}=10V I_E=0 f=1.0MHz		19		pF

电参数曲线图 / Electrical Characteristic Curve

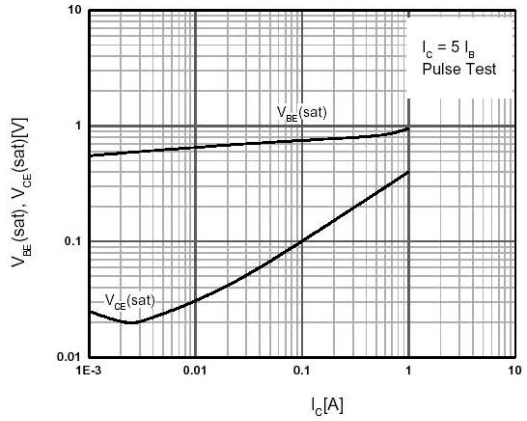
IC - VCE



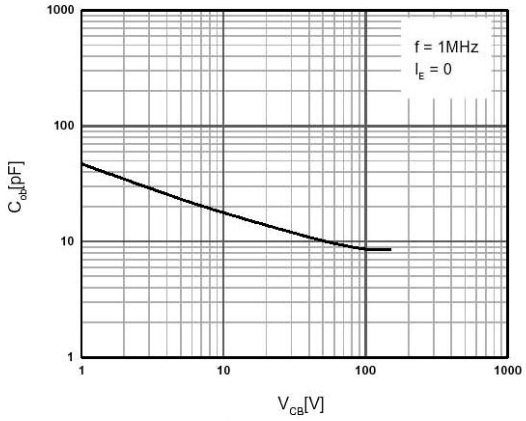
hFE - IC



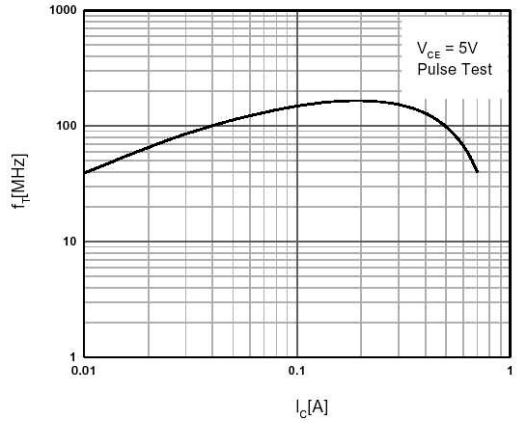
VBE(sat), VCE(sat) - IC



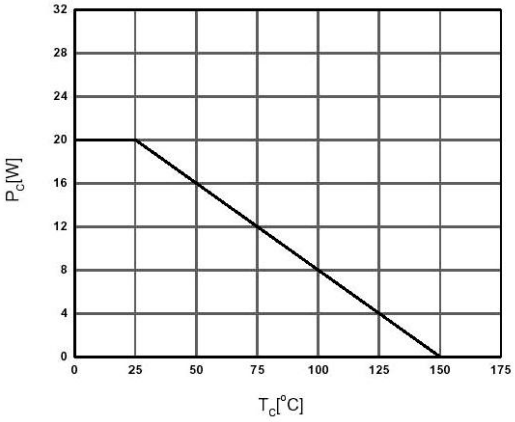
Cob - VCB



fT - IC



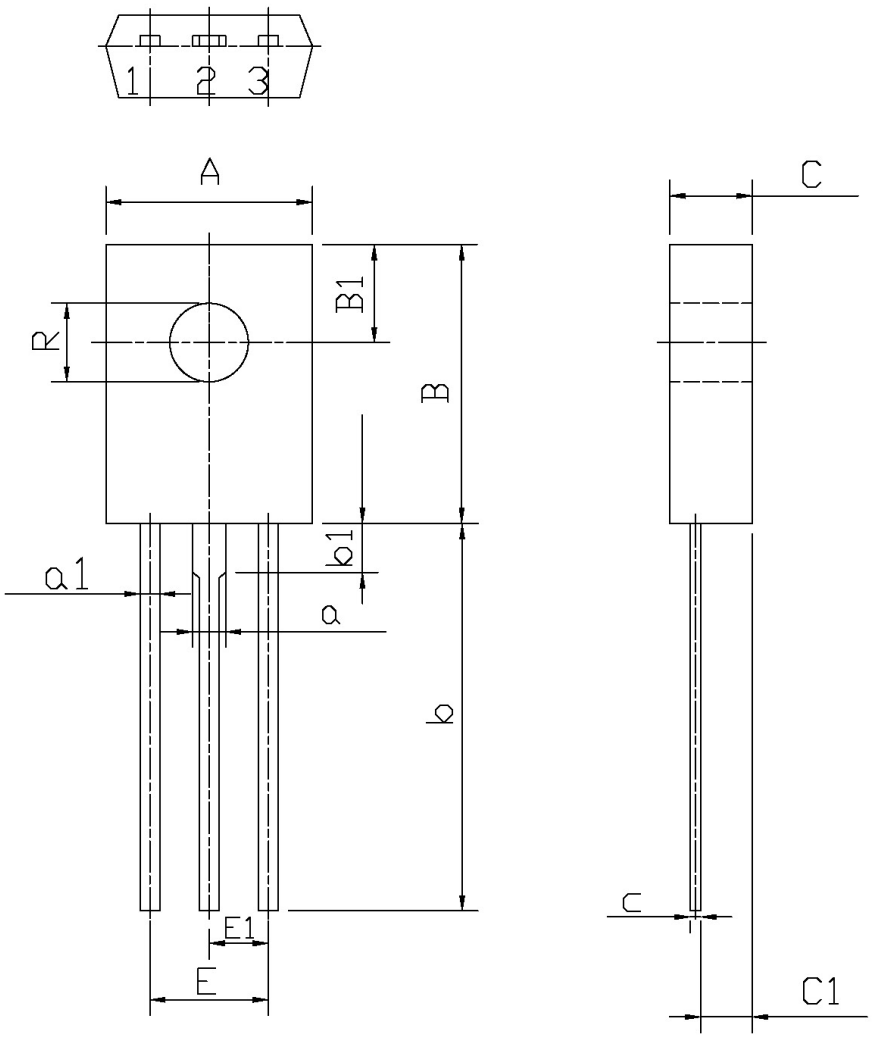
PC - TC



外形尺寸图 / Package Dimensions

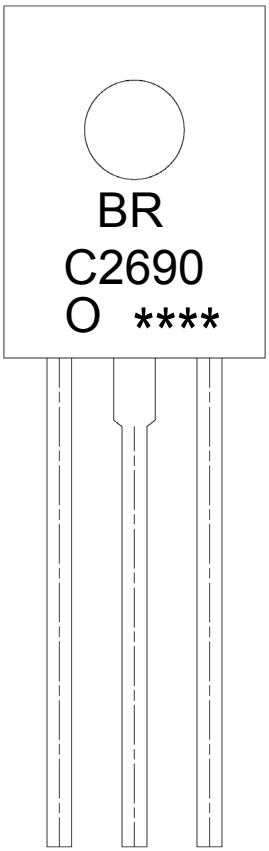
TO-126F

单位：mm



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	7.8	8.2	a1	0.66	0.86
B	10.8	11.2	E	4.4	4.8
B1	3.8	4.2	C	3.1	3.3
R	2.95	3.15	C1	1.9	2.1
b	14	16	c	0.3	0.6
b1	1.9		a	1.27	
E1	2.1	2.5			

印章说明 / Marking Instructions



说明：

BR： 为公司代码

C2690： 为型号代码

O： 为 h_{FE} 分档代码

****： 为生产批号代码，随生产批号变化。

Note:

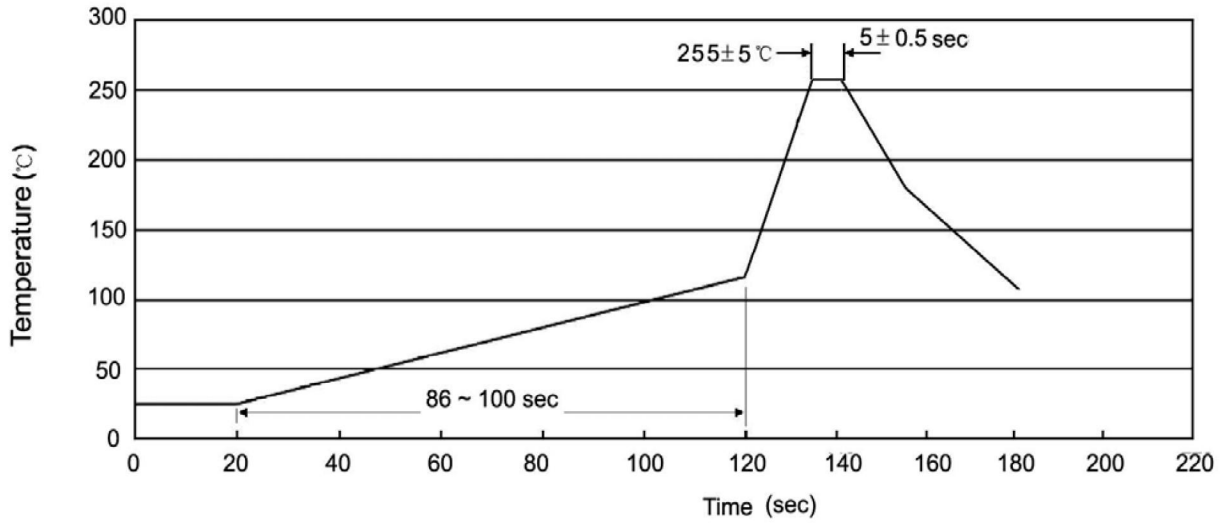
BR: Company Code

C2690: Product Type.

O: h_{FE} Classifications Symbol

****: Lot No. Code, code change with Lot No.

波峰焊温度曲线图(无铅) / Temperature Profile for Dip Soldering(Pb-Free)



说明：

1、预热温度 25～150℃，时间 60～90sec;

2、峰值温度 255±5℃，时间持续为 5±0.5sec;

3、焊接制程冷却速度为 2～10℃/sec.

Note:

1.Preheating:25~150℃, Time:60~90sec.

2.Peak Temp.:255±5℃, Duration:5±0.5sec.

3. Cooling Speed: 2~10℃/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：270±5℃　　时间：10±1 sec.　　Temp.:270±5℃　　Time:10±1 sec

包装规格 / Packaging SPEC.

散件包装 / BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-126/F	500	6	3,000	5	15,000	135×190	237×172×102	560×245×195

套管包装 / TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-126/F	65	26	1,690	5	8,450	532×31×5.6	555×164×50	575×290×180

使用说明 / Notices