

# KSC2690(A)

Rev.E Mar.-2016

## / Descriptions

TO-126F

NPN

Silicon NPN transistor in a TO-126F Plastic Package.

## / Features

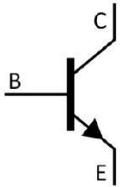
KSA1220(A)

Complementary pair with KSA1220(A).

## / Applications

Audio frequency and high frequency power amplifier.

## / Equivalent Circuit



## / Pinning



PIN1 Emitter

PIN 2 Collector

PIN 3 Base

## / $h_{FE}$ Classifications & Marking

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

**/ Absolute Maximum Ratings(Ta=25 )**

Parameter	Symbol	Rating	Unit	
Collector to Base Voltage	V <sub>CBO</sub>	KSC2690	120	V
		KSC2690A	160	
Collector to Emitter Voltage	V <sub>CEO</sub>	KSC2690	120	V
		KSC2690A	160	
Emitter to Base Voltage	V <sub>EBO</sub>	5.0	V	
Collector Current - Continuous	I <sub>C</sub>	1.2	A	
Peak Collector Current – Continuous	I <sub>CM</sub>	2.5	A	
Collector Power Dissipation	P <sub>C</sub>	1.2	W	
Collector Power Dissipation	P <sub>C</sub> (T <sub>C</sub> =25 )	20	W	
Junction Temperature	T <sub>j</sub>	150		
Storage Temperature Range	T <sub>stg</sub>	-55 150		

**/ Electrical Characteristics(Ta=25 )**

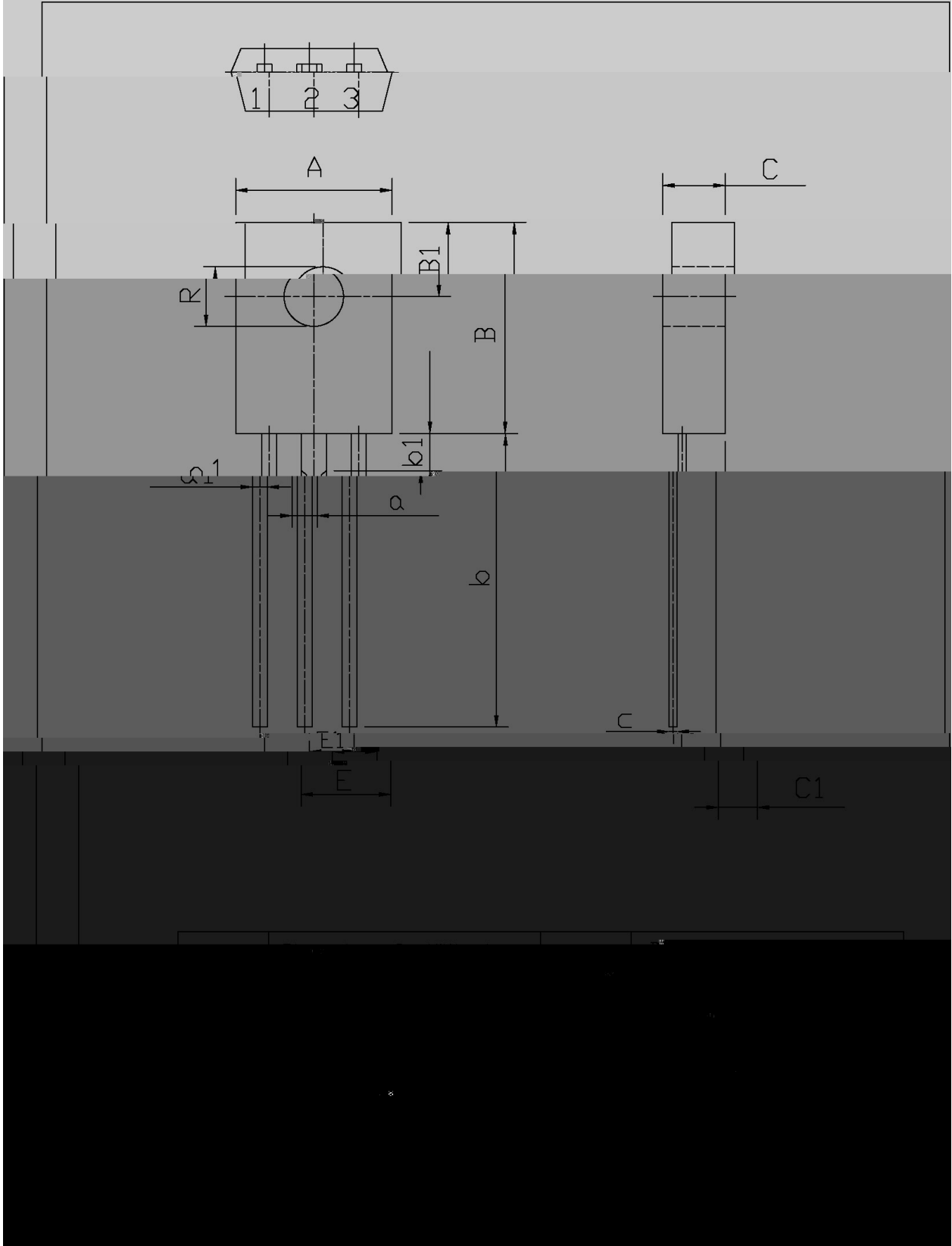
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I <sub>CBO</sub>	V <sub>CB</sub> =120V I <sub>E</sub> =0			1.0	μA
Emitter Cut-Off Current	I <sub>EBO</sub>	V <sub>EB</sub> =3.0V I <sub>C</sub> =0			1.0	μA
DC Current Gain	h <sub>FE(1)</sub>	V <sub>CE</sub> =5.0V I <sub>C</sub> =0.3A	60	140	320	
	h <sub>FE(2)</sub>	V <sub>CE</sub> =5.0V I <sub>C</sub> =5.0mA	35	105		
Collector to Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =1.0A I <sub>B</sub> =0.2A		0.4	0.7	V
Base to Emitter Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =1.0A I <sub>B</sub> =0.2A		1.0	1.3	V
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> =5.0V I <sub>C</sub> =0.2A		155		MHz
Collector output capacitance	Cob	V <sub>CB</sub> =10V f=1.0MHz I <sub>E</sub> =0		19		pF



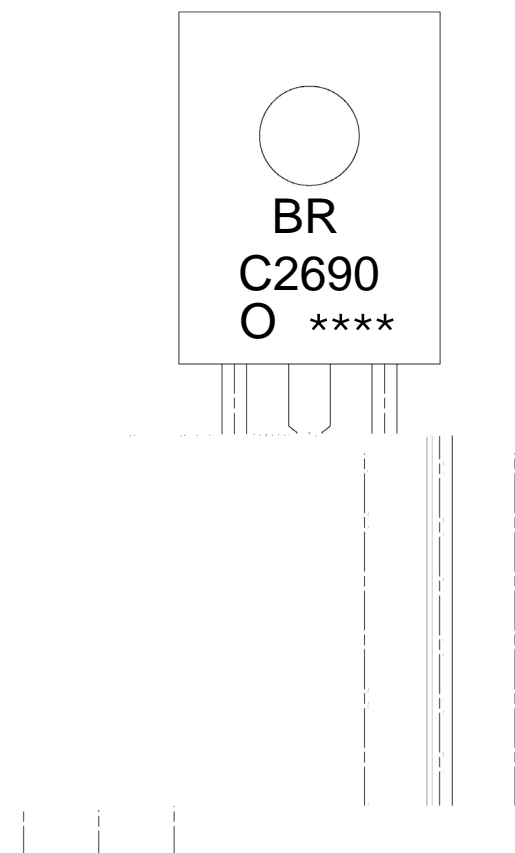
/ Package Dimensions

TU-126F

单位: mm



**/ Marking Instructions**



BR

C2690

O

$h_{FE}$

\*\*\*\*

Note:

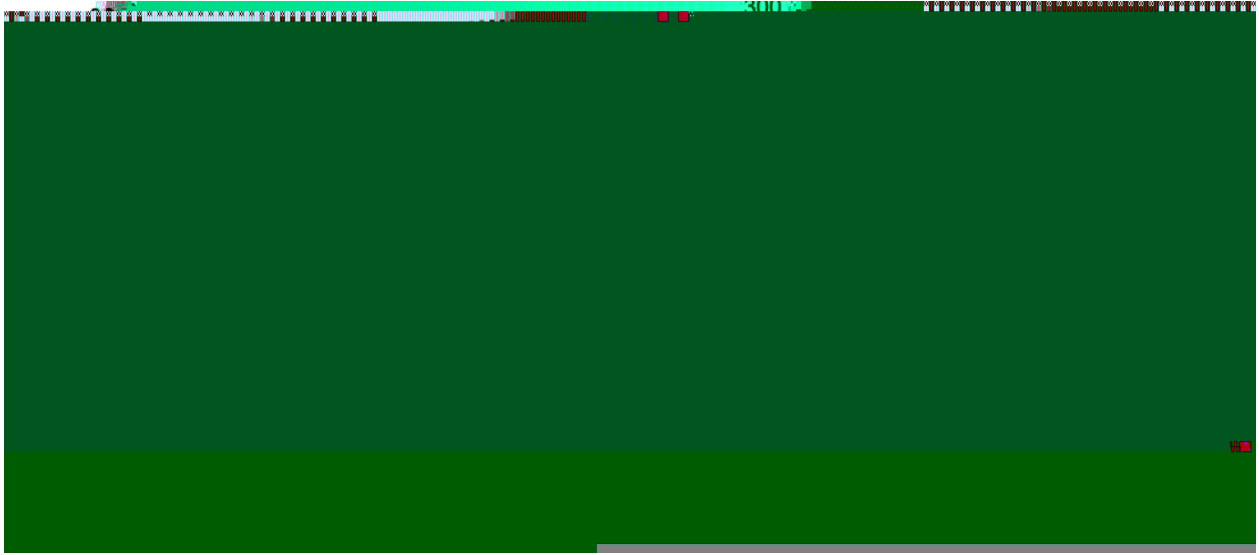
BR: Company Code

C2690: Product Type.

O:  $h_{FE}$  Classifications Symbol

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

( ) / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- |   |       |     |           |        |   |
|---|-------|-----|-----------|--------|---|
| 1 | 25    | 150 | 60        | 90sec; | 1.Preheating:25~150 , Time:60~90sec.    |
| 2 | 255±5 |     | 5±0.5sec; |        | 2.Peak Temp.:255±5 , Duration:5±0.5sec. |
| 3 |       | 2   | 10        | /sec.  | 3. Cooling Speed: 2~10 /sec.            |

/ Resistance to Soldering Heat Test Conditions

270±5                      10±1 sec.                      Temp.:270±5                      Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	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

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm <sup>3</sup> )		
	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

/ Notices