

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).

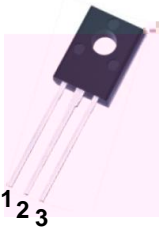
/ Applications

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 _{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 (T _C =25)	20	W	
Junction Temperature	T _j	150		
Storage Temperature Range	T _{stg}	-55 150		

/ Electrical Characteristics(Ta=25)

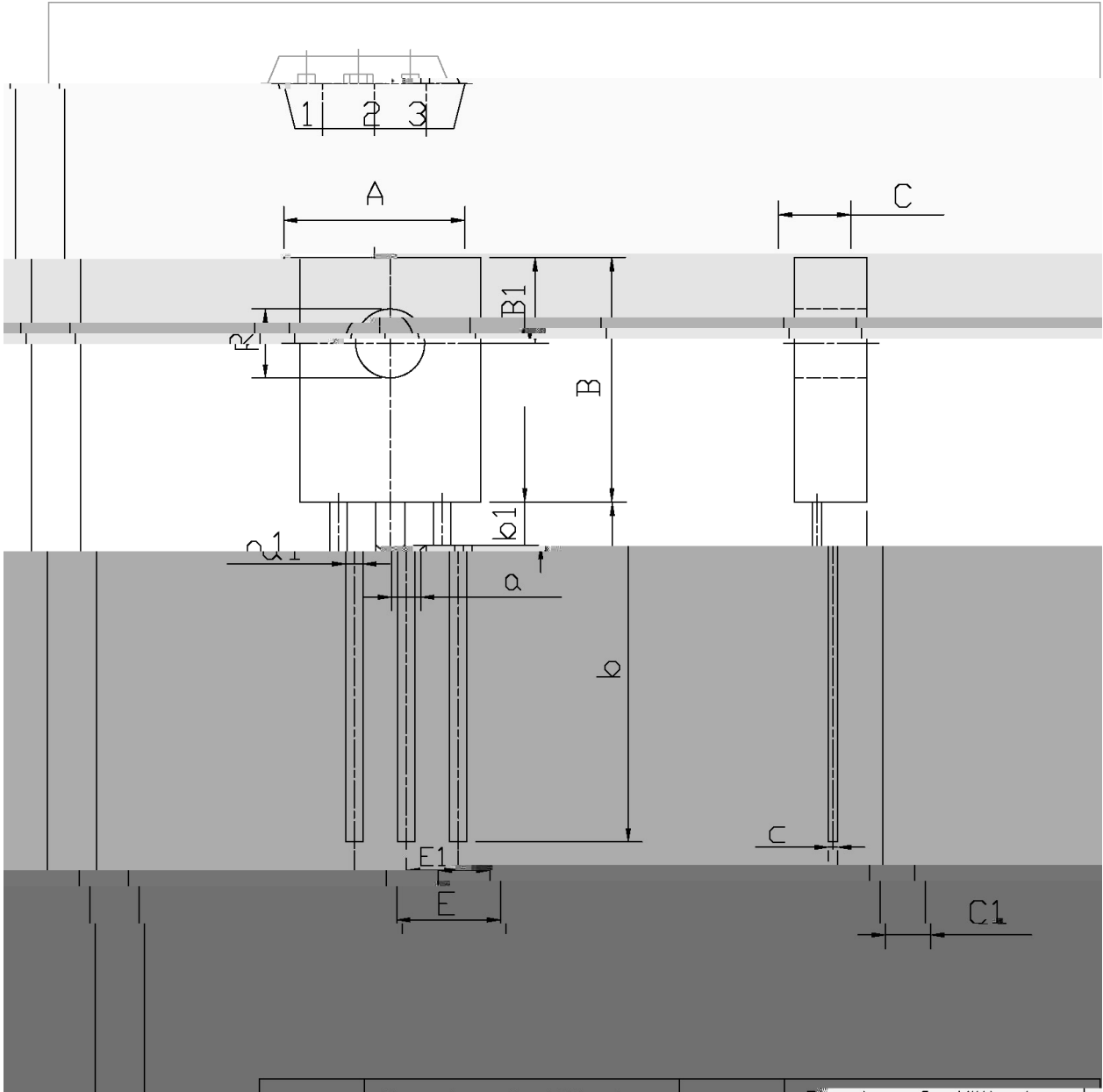
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I _{CBO}	V _{CB} =120V I _E =0			1.0	μA
Emitter Cut-Off Current	I _{EBO}	V _{EB} =3.0V I _C =0			1.0	μA
DC Current Gain	h _{FE(1)}	V _{CE} =5.0V I _C =0.3A	60	140	320	
	h _{FE(2)}	V _{CE} =5.0V I _C =5.0mA	35	105		
Collector 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	C _{ob}	V _{CB} =10V I _E =0 f=1.0MHz		19		pF

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/ Package Dimensions

TU-126F

单位: mm



Dimension		Dimension In Millimeter		
Symbol	Min	Max	Symbol	Min
A	7.8	8.2	a ₁	0.65
B	1.08	1.12	E	4.4
B ₁	0.8	1.0	a	0.1
R	2.05	2.15	C ₁	1.0

/ Marking Instructions



BR

C2690

O

h_{FE}

Note:

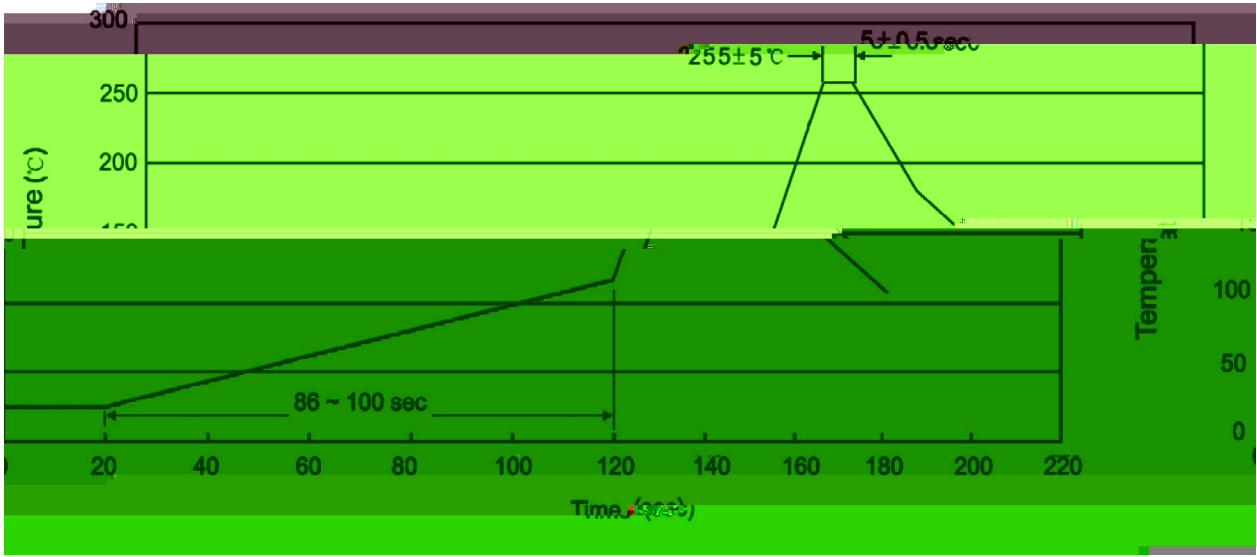
BR: Company Code

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 | 5 | | | | |