KSC2690(A)

Rev.E Mar.-2016

DATA SHEET

/ Descriptions

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

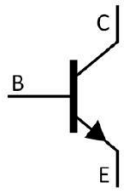
/ Features

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

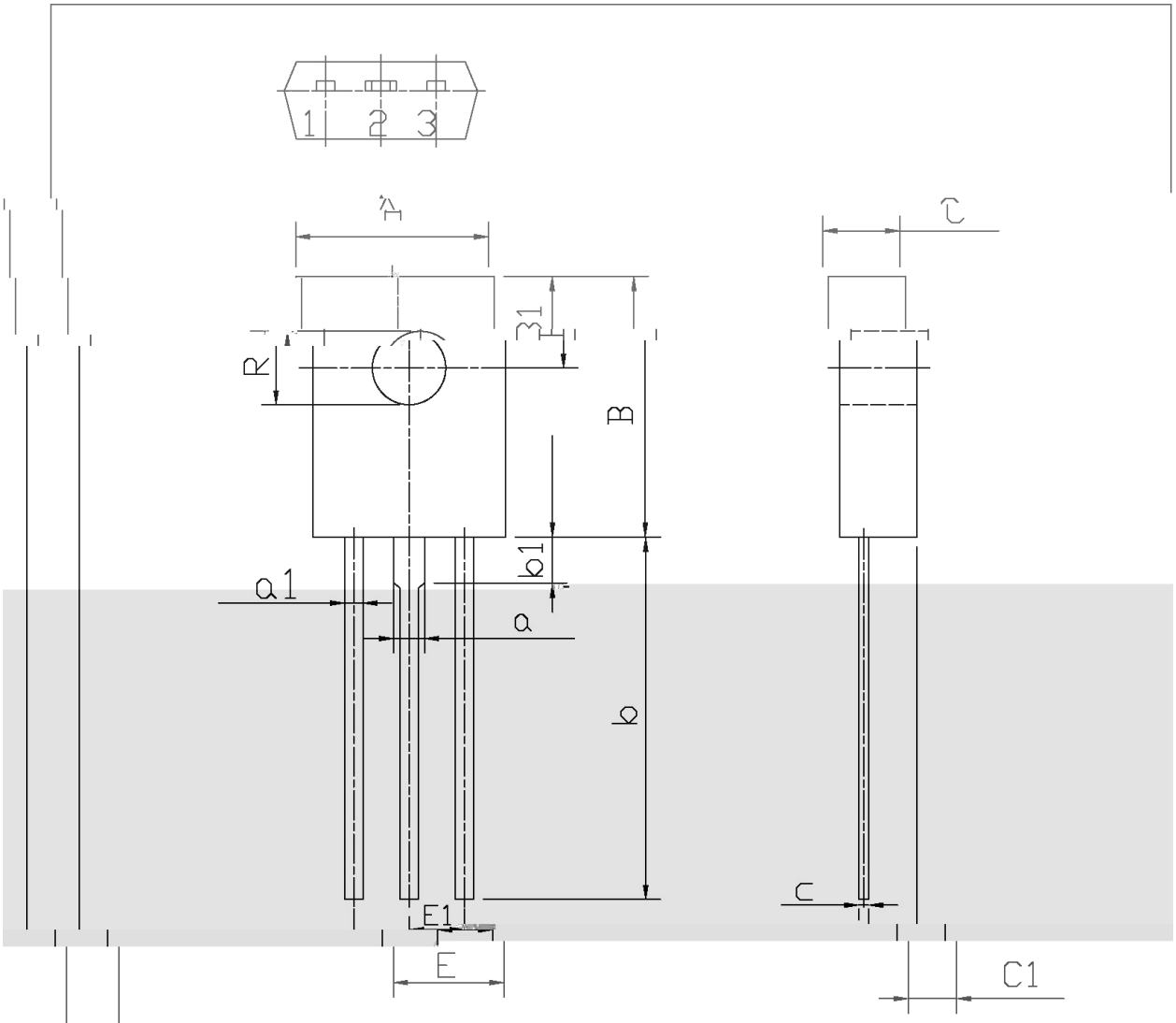
/ Absolute Maximum Ratings(Ta=25)

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(Tc=25)		20	W
Junction Temperature	T_j		150	
Storage Temperature Range	T_{stg}		-55 150	

/ Electrical Characteristics(Ta=25)

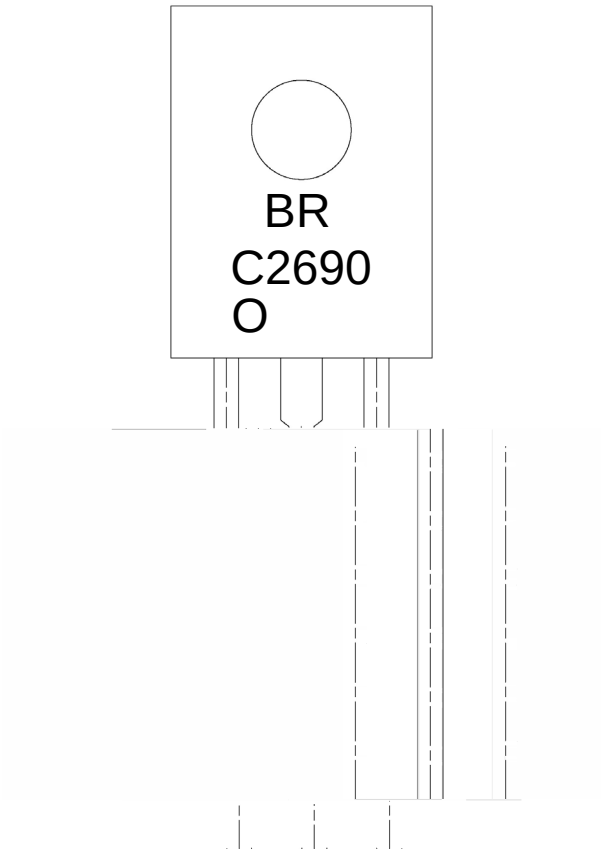
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=120V I_E=0			1.0	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=3.0V I_C=0			1.0	μA
DC Current Gain	$h_{FE(1)}$	V_{CE}=5.0V I_C=0.3A	60	140	320	
	$h_{FE(2)}$	V_{CE}=5.0V I_C=5.0mA	35	105		
Collector to Emitter Saturation 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	Cob	V_{CB}=10V I_E=0 f=1.0MHz		19		pF

/ Package Dimensions



Symbol	Min	Max	Symbol	Min	Max
A	7.8	8.2	a1	0.66	0.86

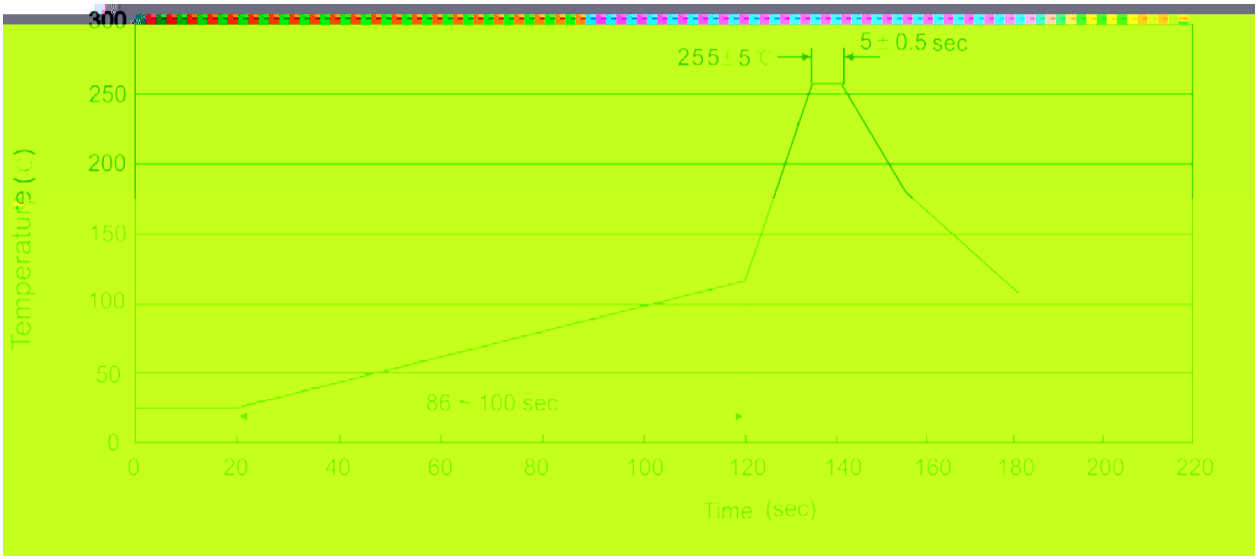
/ Marking Instructions



Note:

BR:		Company Code
	:	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