

# SPECIFICATION

No. \_\_\_\_\_

## STK403-130

2002.12.28

**TENTATIVE**

1. Case Outline 15Pins (See attached Package Outline Diagram)
2. Function 2 channels AF power amplifier
3. Application 100W audio use
4. Maximum Ratings / Ta=25°C

Item	Symbol	Conditions	Ratings	Unit
Maximum Power Supply Voltage 0	Vcc max(0)	Non- signal	+71.5	V
Maximum Power Supply Voltage	Vcc max(1)	Signal ,RL 6ohm	+63	V
Minimum Operation Supply Voltage	Vcc min		+10	V
#12 Maximum Operating Current *7	IST OFF max		0.6	mA
Thermal Resistance	Theta j-c	Per one power TR	1.7	°C/W
Junction Temperature	Tj max	Should satisfy Tj max and Tc max	150	°C
Operating Substrate Temperature	Tc max		125	°C
Storage Temperature	Tstg		-30 to +125	°C
Available Time for Load Short-circuit *4	ts	Vcc=+44V,RL=6ohm,f=50Hz Po=100W,1ch drive	0.3	s

### 5. Operating Characteristics

Tc=25°C ,RL=6ohm(Non-inductive Load),Rg=600ohm,VG=30dB

Item	Symbol	Conditions				Ratings			Unit
		V (V)	f (Hz)	Po (W)	THD (%)	MIN.	TYP.	MAX.	
Output Power *1	Po 1	+44	20 to 20k		0.4	96	100		W
	Po 2	+44	1k		10		150		
THD *1	THD 1	+44	20 to 20k	5.0	VG=30dB			0.4	%
	THD 2	+44	1k				0.01		
Frequency Characteristics *1	fL,fH	+44		1.0	+0 -3 dB	20 to 50k			Hz
Input Impedance	ri	+44	1k	1.0			55		kohm
Output Noise Voltage *3	VNO	+53			Rg=2.2kohm			1.0	mVrms
Quiescent Current	ICCO	+53			No load	20	45	80	mA
Output Neutral Voltage	VN	+53				-70	0	+70	mV
#13 Stand-By Current	IST ON	+44			V#13=5V #13PIN			0	mA
#13 Operating Current	IST OFF	+44			Resistance R1=13kohm	0.25		0.6	mA

\*Specifications and information herein are subject to change without notice.

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Note \*1.1channel Operation.

\*2.All tests are measured using a constant-voltage supply unless otherwise specified.

\*3.The output noise voltage is peak value of an average-reading meter with a rms value scale(VTVM).

A regulated AC supply(50Hz) should be used to eliminate the effects of AC primary line flicker noise.

\*4.Available time for load short-circuit and output noise voltage are measured using the specified transformer power supply.

\*5.Please keep the condition always most below Voltage '–Pre Vcc(#1pin)'.

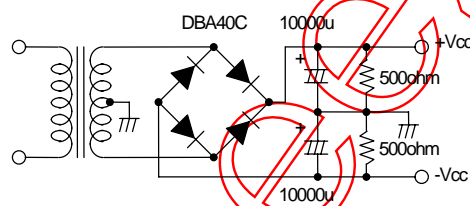
\*6.In case of heat sink design, we request customer to design in the condition to have assumed market.

\*7.Please specify resistance value by satisfying '#13(Stand-By)pin' Maximum Operating Current.

This Circuit change operation mode to give above  $V_{BE}$ (about 0.6v) voltage at '#13(Stand-By)pin'.

\*8.The case of this Hybrid-IC is using thermoplastic adhesive.

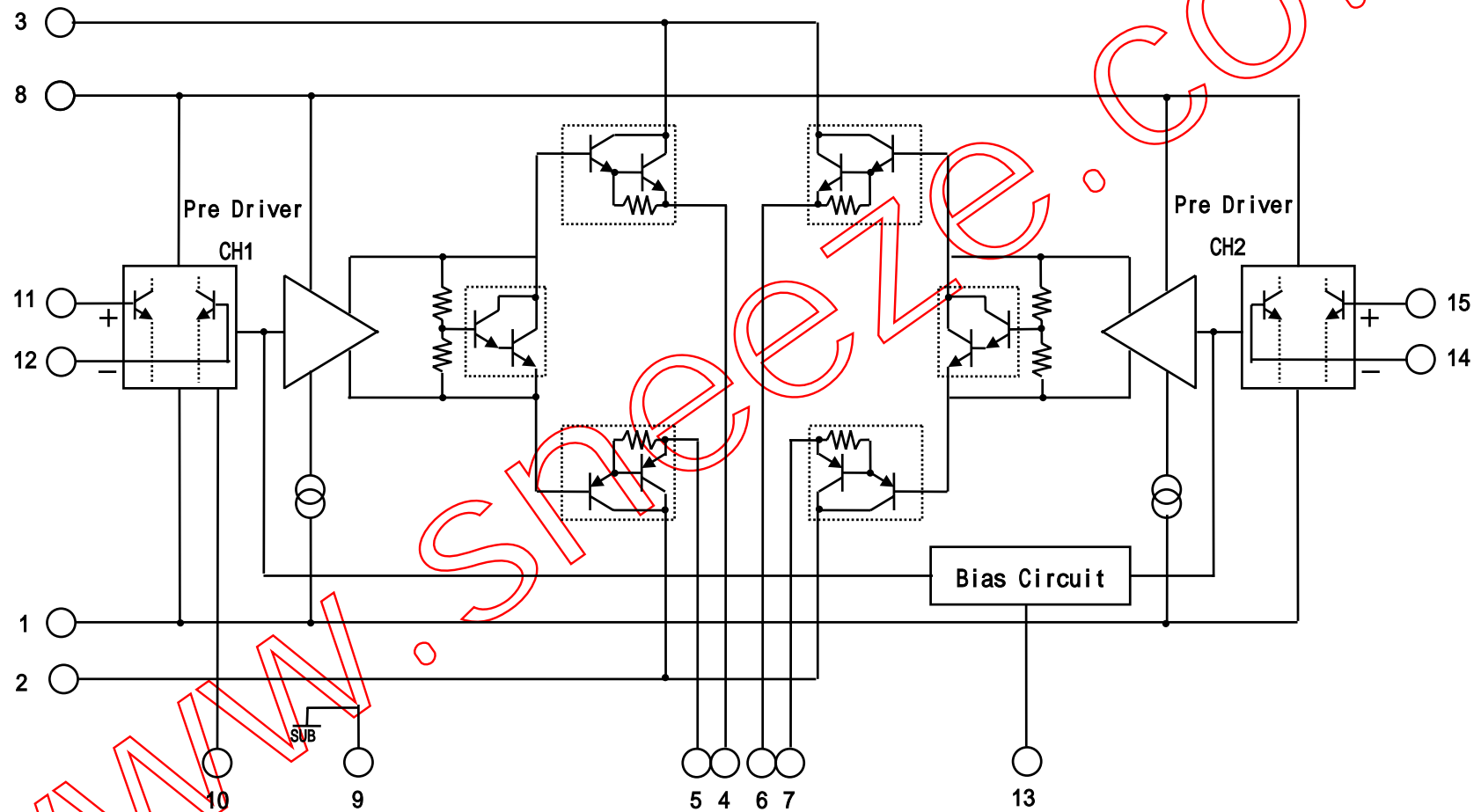
Specified Transformer Power Supply



(Equivalent to MG-250)

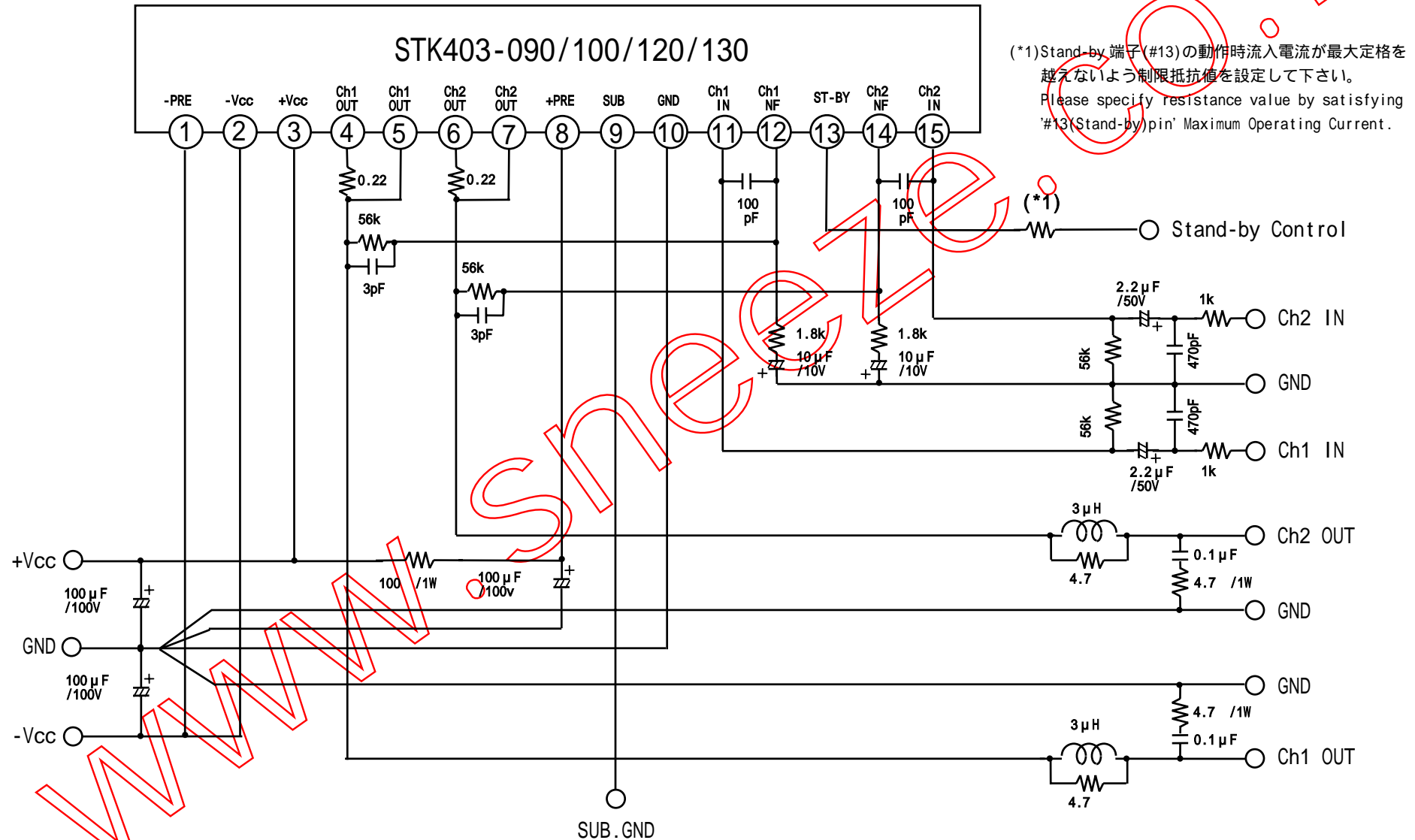
# 内部等価回路

Equivalent Block Diagram (STK403-090/100/120/130)



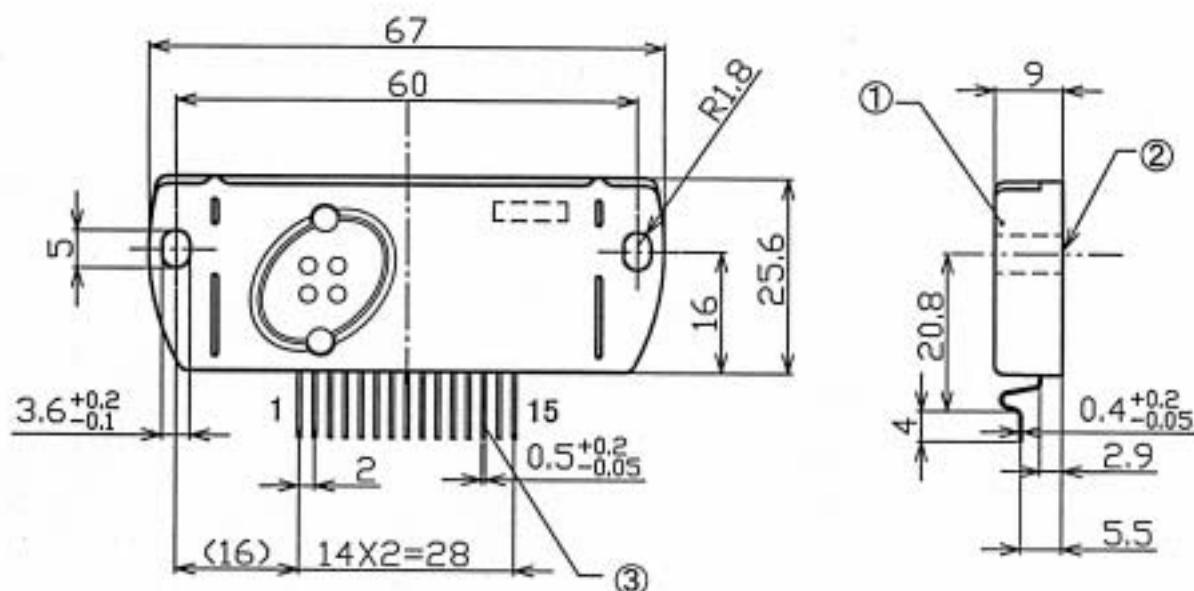
# 測定回路図

## Test Circuit (STK403-090/100/120/130)



# PACKAGE DIMENSION

SCALE	1/1	UNIT	mm
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	PARTS	MATERIAL	TREATMENT
①	CASE	PBT	
②	SUBSTRATE	IMST SUBSTRATE	
③	LEAD FRAME	SPCC-SB	COPPER / SOLDER PLATING
④			

DO NOT SCALE  
THIS DRAWING

TOLERANCES UNLESS  
OTHERWISE SPECIFIED

±0.5

DRAWN		DATE	Jul/22/2002	NAME		PART No.	
CHECK		APPROVAL		OUTLINE	EIAJ JEDEC SANYO		

# STK403-100series Stand-by Control & Mute Control Application

2002.07.22

(\*1)Stand-by 端子(#13)の動作時流入電流が最大定格を越えないよう制限抵抗値 R1 を設定して下さい。  
Please specify resistance value by satisfying  
'#13(Stand-by)pin' Maximum Operating Current.

