

# SPECIFICATION

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

## STK403-120

2002.12.28

TENTATIVE

1. Case Outline 15Pins (See attached Package Outline Diagram)
2. Function 2 channels AF power amplifier
3. Application 80W audio use
4. Maximum Ratings / Ta=25°C

Item	Symbol	Conditions	Ratings	Unit
Maximum Power Supply Voltage 0	Vcc max(0)	Non- signal	+65	V
Maximum Power Supply Voltage	Vcc max(1)	Signal ,RL 6ohm	+57	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	1.9	°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=+40V,RL=6ohm,f=50Hz Po=80W,1ch drive	0.3	s

### 5. Operating Characteristics

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

Item	Symbol	Conditions *2					Ratings			Unit
		V (V)	f (Hz)	Po (W)	THD (%)		MIN.	TYP.	MAX.	
Output Power *1	Po 1	+40	20 to 20k		0.4		76	80		W
	Po 2	+40	1k		10			120		
THD *1	THD 1	+40	20 to 20k	5.0		VG=30dB			0.4	%
	THD 2	+40	1k						0.01	
Frequency Characteristics *1	fl,fH	+40		1.0		+0 -3 dB	20 to 50k			Hz
Input Impedance	ri	+40	1k	1.0				55		kohm
Output Noise Voltage *3	VNO	+48				Rg=2.2kohm			1.0	mVrms
Quiescent Current	ICCO	+48				No load	20	45	80	mA
Output Neutral Voltage	VN	+48					-70	0	+70	mV
#13 Stand-By Current	IST ON	+40				V#13=5V #13PIN			0	mA
#13 Operating Current	IST OFF	+40				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.

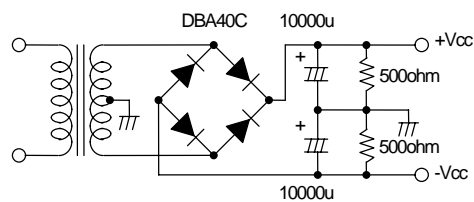
\*5.Please keep the condition always most below Voltage '-Pre Vcc(#1pin)'.  
-Pre Vcc(#1pin)

\*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'.

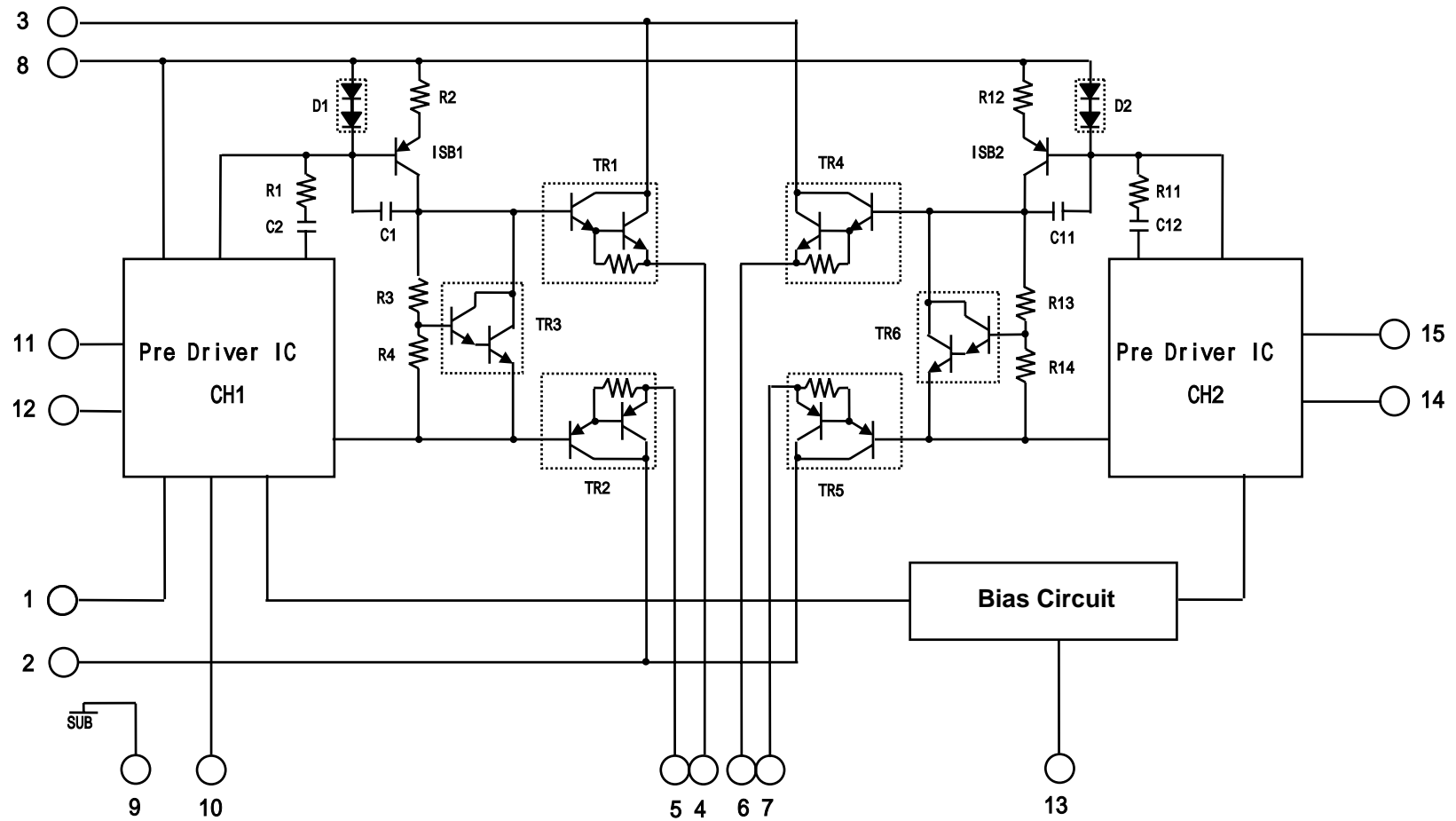
Specified Transformer Power Supply



(Equivalent to MG-250)

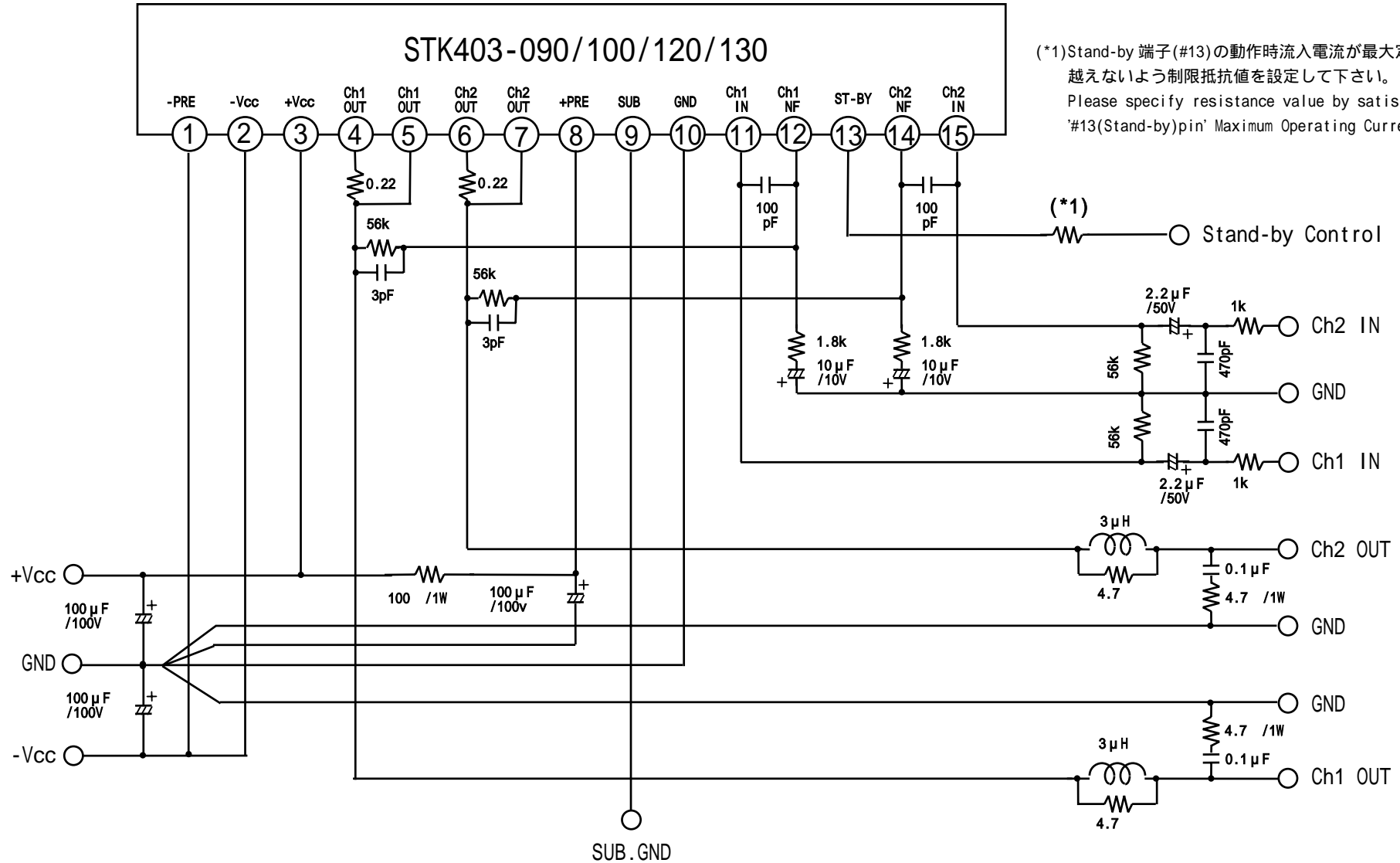
# 内部等価回路

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



# 測定回路図

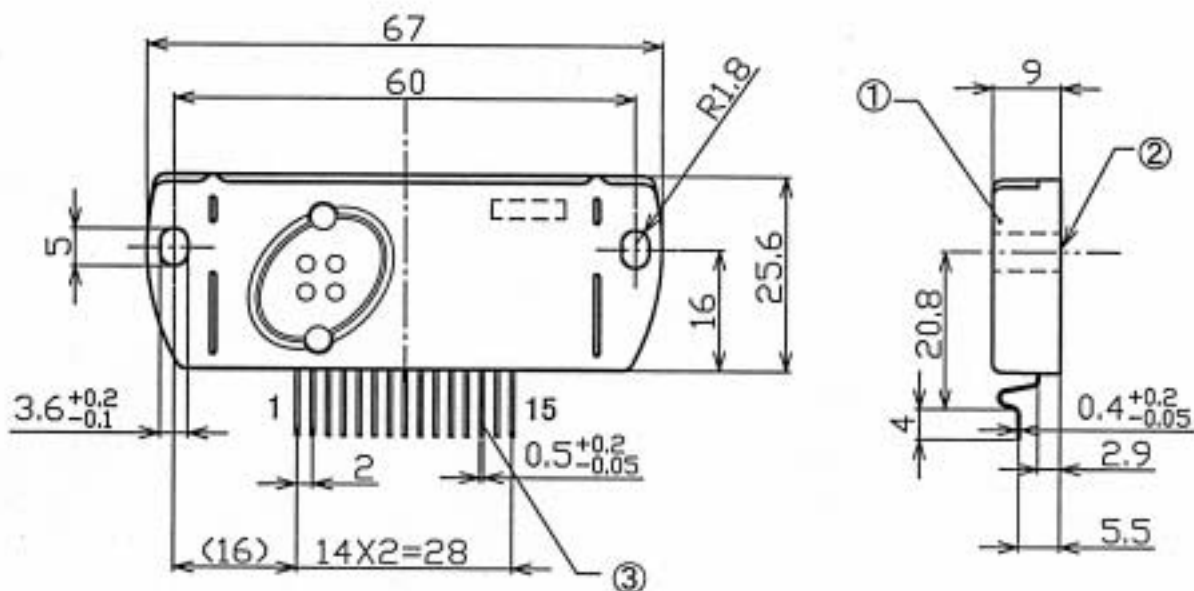
## Test Circuit (STK403-090/100/120/130)



(\*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を設定して下さい。  
Please specify resistance value by satisfying '13(Stand-by)pin' Maximum Operating Current.

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.

