

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		150	°C
Operating Substrate Temperature	Tc max	Should satisfy Tj max and 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 Resistance R1=13kohm			0	mA
#13 Operating Current	Ist OFF	+40					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.

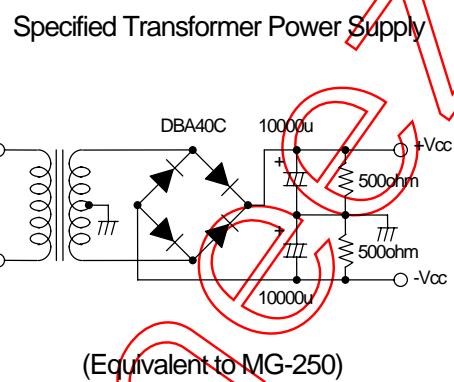
*4.Available time for load short-circuit and output noise voltage are measured using the specified transformer power supply.

*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.

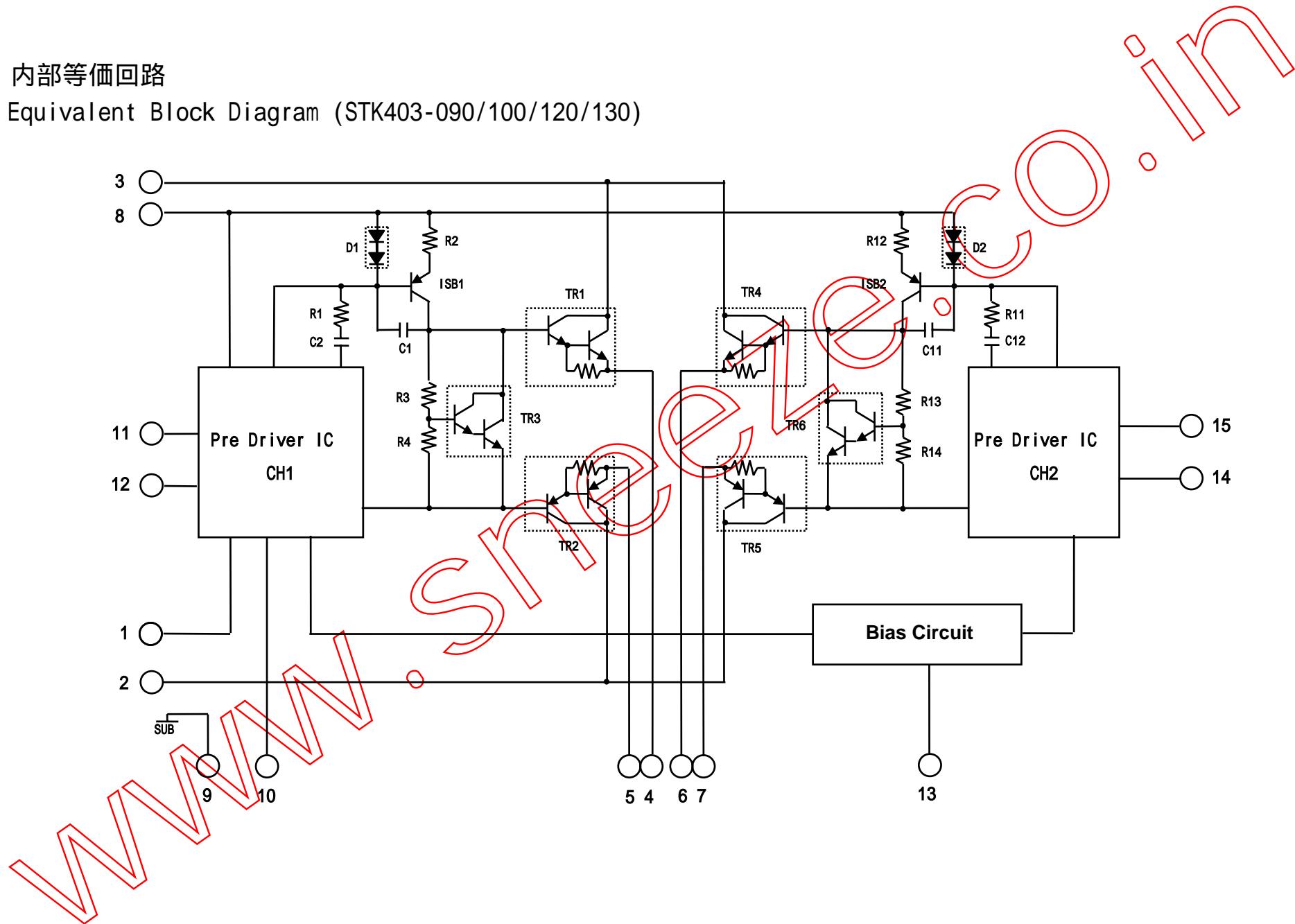
*7.Please specify resistance value by satisfying '#13(Stand-By)pin' Maximum Operating Current.

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



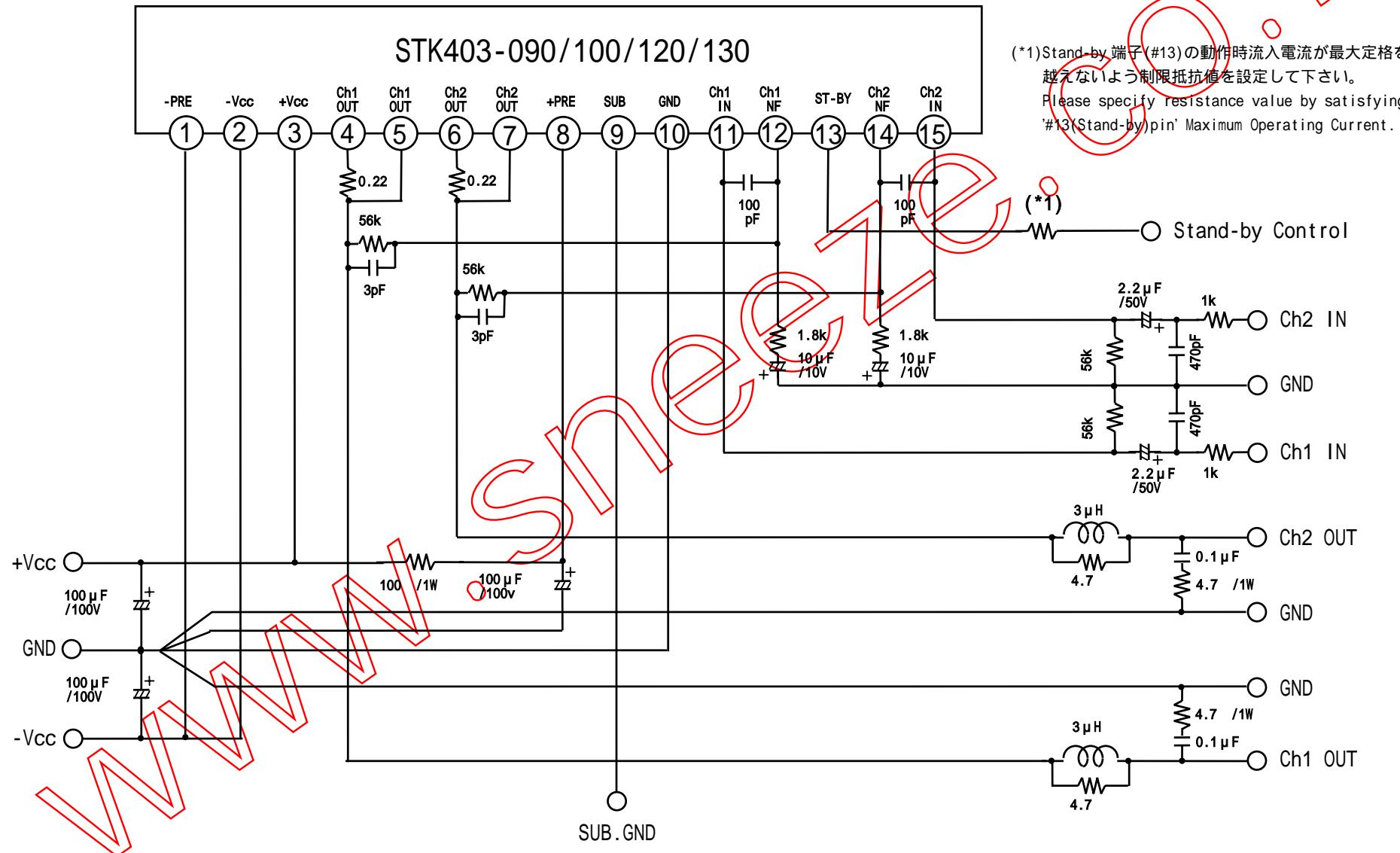
内部等価回路

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



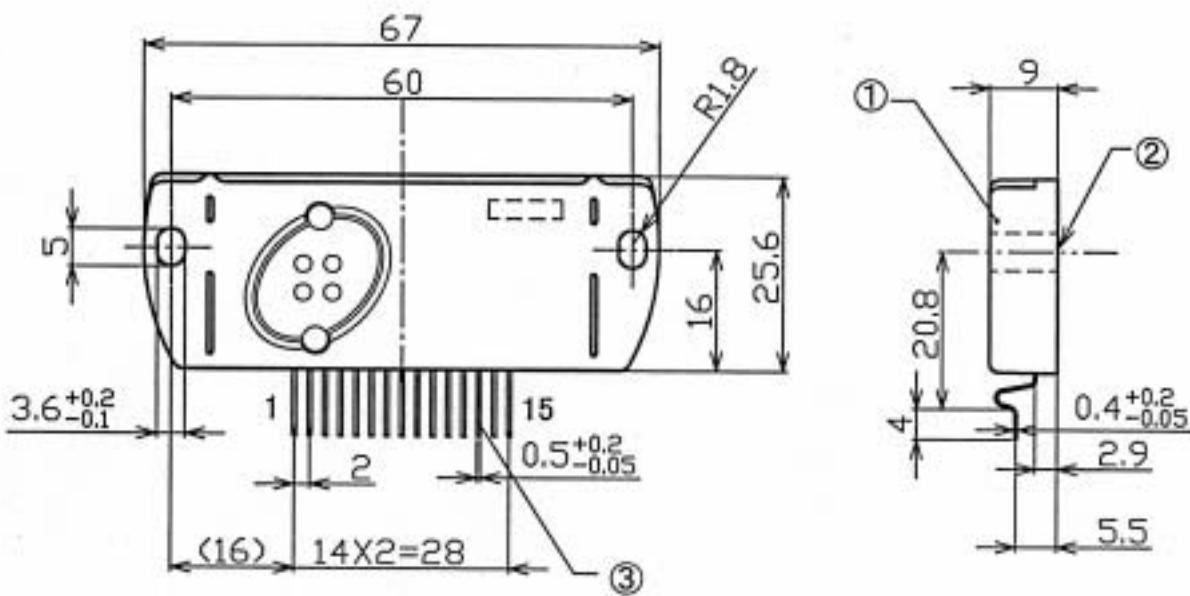
測定回路図

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	
DO NOT SCALE THIS DRAWING		TOLERANCES UNLESS OTHERWISE SPECIFIED	±0.5	④
DRAWN		DATE	Jul/22/2002	NAME _____
CHECK		APPROVAL		OUTLINE EIAJ _____ JEDEC _____ SANYO _____ PART No. _____

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

2002.07.22

