

# SPECIFICATIONS

## STK442-090

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

2000.04.18

1. Case Outline 14Pins (See attached outline drawing)
2. Function class AB 2 channels AF power amplifier
3. Application 50W audio use
4. Maximum Ratings / Ta=25deg

**TENTATIVE**

Item	Symbol	Conditions	Ratings	Unit
Power Supply Voltage 1	Vcc max(1)	No signal	+54	V
Power Supply Voltage 2	Vcc max(2)	Signal, RL=8ohm, 6ohm	+47	V
Thermal Resistance	Theta j-c	Per one power TR	2.2	deg/W
Junction Temperature	Tj max		150	deg
Operating Substrate Temperature	Tc max		125	deg
Storage Temperature	Tstg		-30 to +125	deg
Available Time for Load Short-circuit *4	ts	Vcc=+35V, RL=6ohm, f=50Hz Po=50W, 1ch drive	0.3	s

5. Operating Characteristics  
Tc=25deg, 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	Po1	+35	20 to 20k		0.4		50			W
	Po2	+35	1k		10			80		
THD *1	THD	+35	20 to 20k	50				0.2		%
Frequency Characteristics *1	fi, fh	+35		1.0		+0 -3 dB	20 to 50k			Hz
Input Impedance	ri	+35	1k	1.0				55		kohm
Output Noise Voltage *3	Vno	+42				Rg=2.2 kohm			1.0	mVrms
Quiescent Current	Iqoo	+42							80	mA
Output Neutral Voltage	VN	+42					-70	0	+70	mV

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

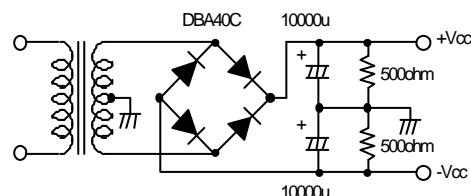
Note \*1.1ch Drive

\*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.

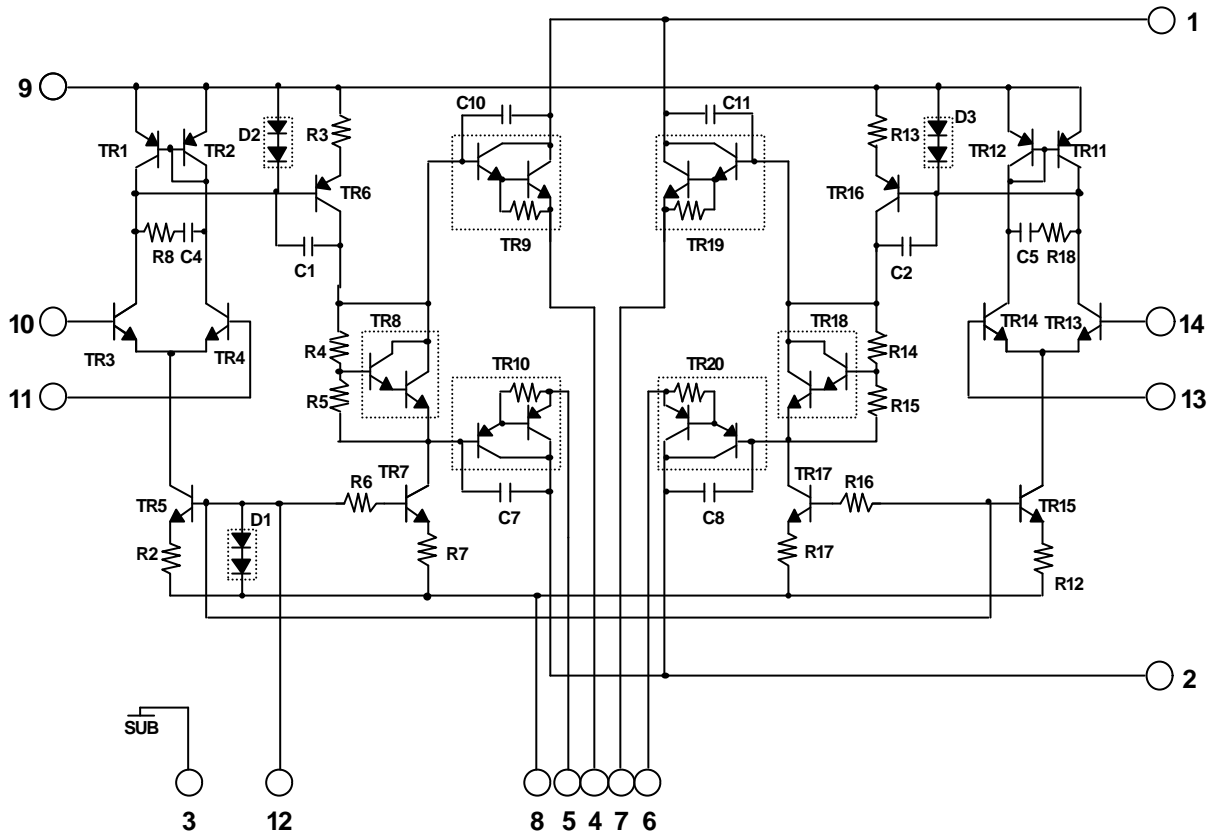
\*4.Available time for load short-circuit and output noise voltage are measured using the specified transformer power supply.

Specified Transformer Power Supply

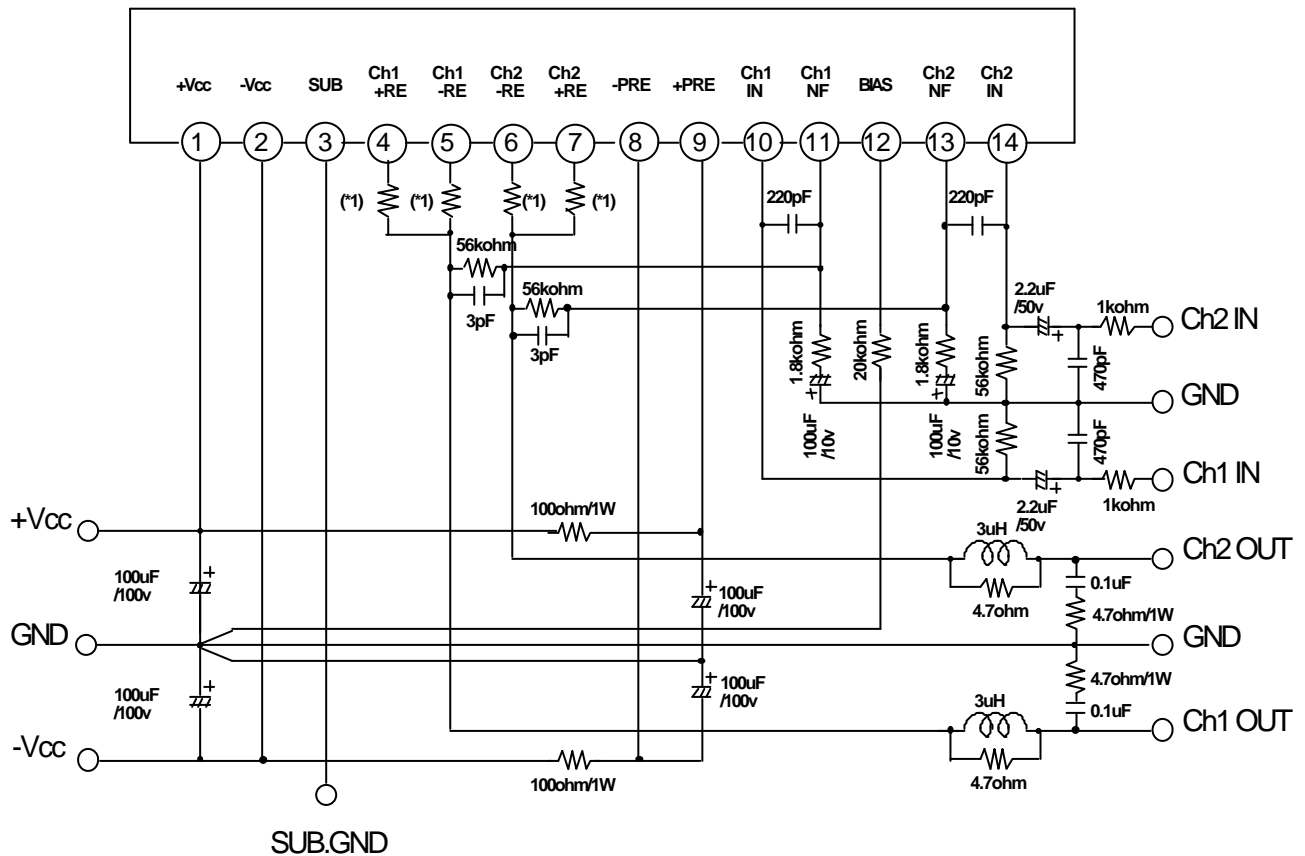


(Equivalent to MG-200)

## Equivalent Block Diagram



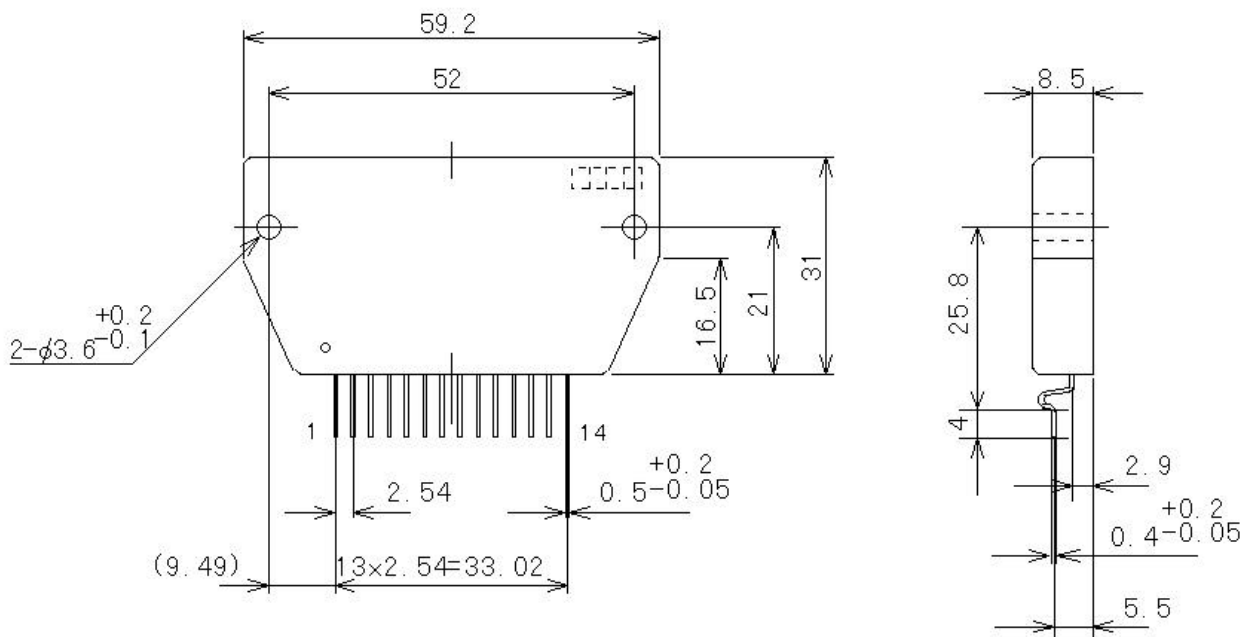
## Test Circuit



(\*1) Metal Plate Cement Resistor 0.22ohm $\pm$ 10%(5W)

## Case Outline

Unit:mm



- \* No production described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure, of which may directly or indirectly cause injury, death or property loss
- \* Anyone purchasing any products described or contained herein for an above-mentioned use shall:
  1. Accept full responsibility and indemnify and defend SANYO ELECTRIC CO.,LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damage, cost and expenses associated with such use:
  2. Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO.,LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- \* Information (including circuit diagrams and circuit parameters) herein is for example only ; it is not guaranteed for volume production. SANYO believes its use or any infringements of intellectual property rights or other rights of third parties.

This catalog provides information as of April, 2000. Specifications and information herein are subject to change without notice.