



## STK350-030

### 2-Channel AF Voltage Amplifier (90 to 100W/channel supported)

#### Overview

The STK350-030 is a voltage amplifier for use in audio power output stages. It comprises a 2-channel amplifier integrated in a small package, making possible audio set miniaturization and design simplification.

#### Features

- Split power supply for wide bandwidth (f=20Hz to 20kHz).
- Member of a family of devices with power capacities from 40W to 150W.
- Compact package.
- High withstand voltage.

#### Series Configuration

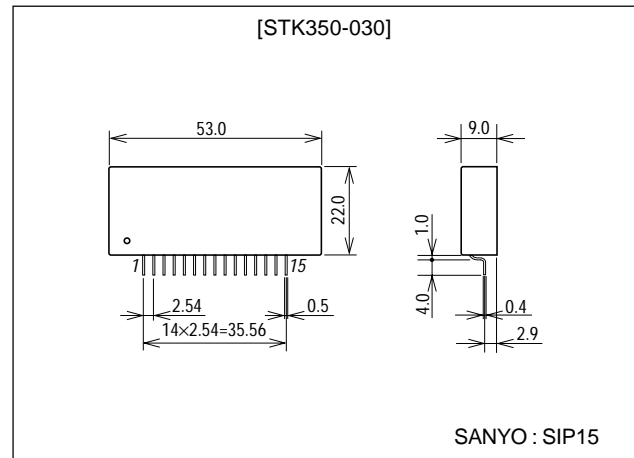
The STK350-030 is a member of a family of devices with differing output capacities.

Type No.	V <sub>CC</sub> max [V]	V <sub>CC</sub> [V]	THD [%]	T <sub>c</sub> max [°C]	Power [W] (R <sub>L</sub> =8Ω)
STK350-000	±55	±36	0.005	115	40 to 60
STK350-010	±59	±41	0.005	115	60 to 80
STK350-020	±65	±47	0.005	115	80 to 90
STK350-030	±75	±50	0.005	115	90 to 100
STK350-040	±80	±55	0.005	115	100 to 120
STK350-050	±90	±60	0.005	115	120 to 150

#### Package Dimensions

unit:mm

4155



- Any and all SANYO products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's control systems, or other applications whose failure can be reasonably expected to result in serious physical and/or material damage. Consult with your SANYO representative nearest you before using any SANYO products described or contained herein in such applications.
- SANYO assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all SANYO products described or contained herein.

## Specifications

Maximum Ratings at Ta = 25°C

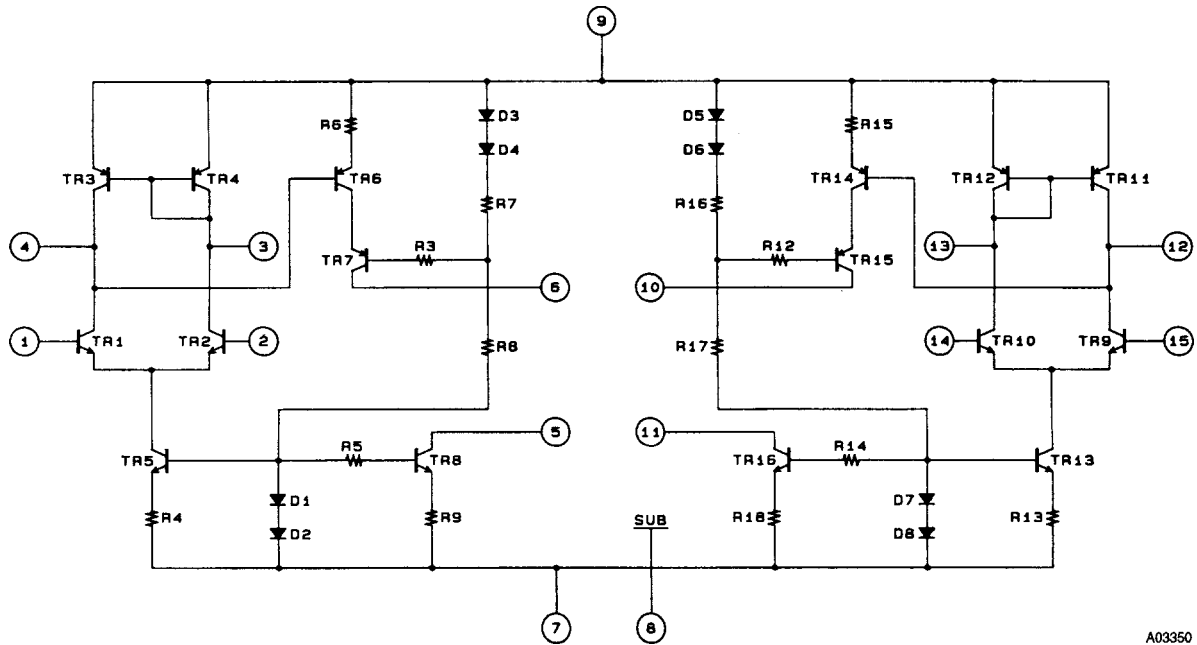
Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V <sub>CC</sub> max		±75	V
Operating substrate temperature	T <sub>c</sub>		115	°C
Storage temperature	T <sub>stg</sub>		-30 to +115	°C

Operating Characteristics at Ta = 25°C, VG=40dB, specified test circuit

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Current drain	I <sub>CC</sub>	V <sub>CC</sub> =±60V		20	30	mA
Neutral voltage	V <sub>N</sub>	V <sub>CC</sub> =±60V	-70		+70	mV
Output noise voltage	V <sub>NO</sub>	V <sub>CC</sub> =±60V, R <sub>g</sub> =10kΩ			1.0	mVrms
Input impedance	r <sub>i</sub>	V <sub>CC</sub> =±60V, f=1kHz, V <sub>O</sub> =2.83V		100		kΩ
Total harmonic distortion	THD	V <sub>CC</sub> =±50V, f=20kHz, V <sub>O</sub> =28.3V			0.005	%

Note. All tests are made using a constant-voltage supply.

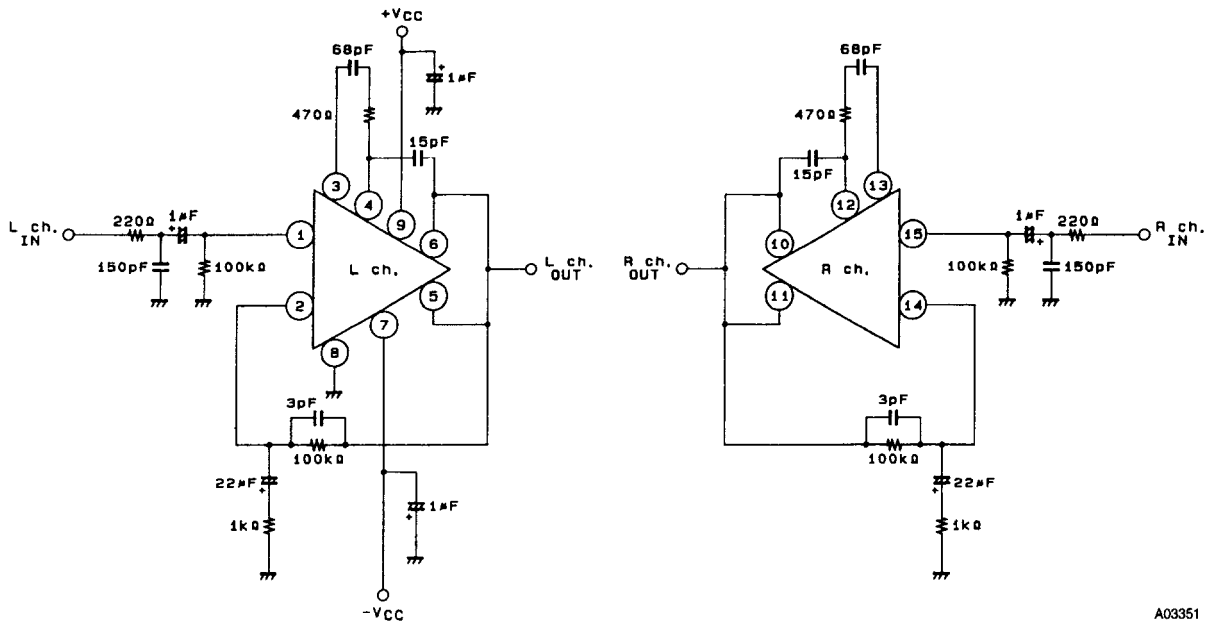
## Equivalent Circuit



A03350

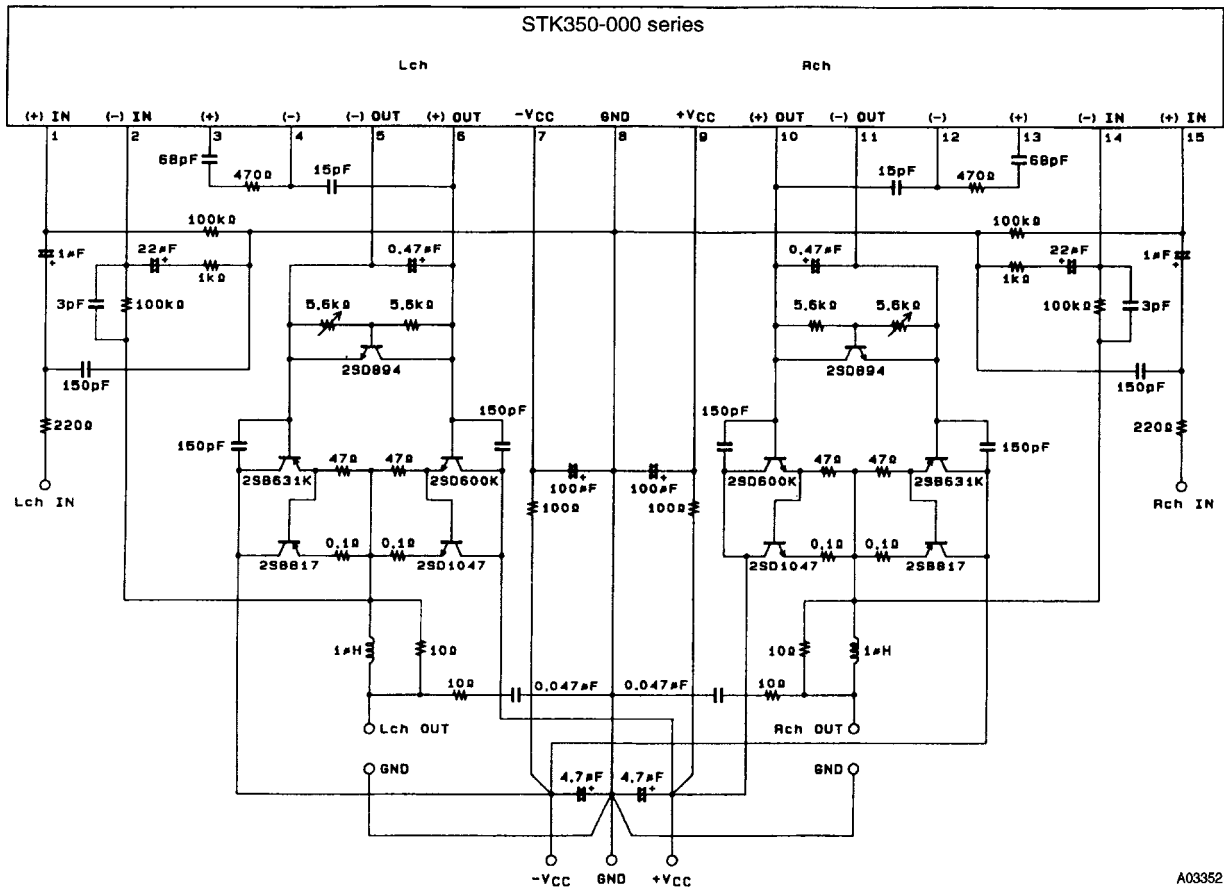
# STK350-030

## Test Circuit



A03351

## Sample Application Circuit-60W/8Ω Amplifier ( $V_{CC}=\pm 41V$ )



A03352

- Specifications of any and all SANYO products described or contained herein stipulate the performance, characteristics, and functions of the described products in the independent state, and are not guarantees of the performance, characteristics, and functions of the described products as mounted in the customer's products or equipment. To verify symptoms and states that cannot be evaluated in an independent device, the customer should always evaluate and test devices mounted in the customer's products or equipment.
- SANYO Electric Co., Ltd. strives to supply high-quality high-reliability products. However, any and all semiconductor products fail with some probability. It is possible that these probabilistic failures could give rise to accidents or events that could endanger human lives, that could give rise to smoke or fire, or that could cause damage to other property. When designing equipment, adopt safety measures so that these kinds of accidents or events cannot occur. Such measures include but are not limited to protective circuits and error prevention circuits for safe design, redundant design, and structural design.
- In the event that any or all SANYO products(including technical data, services) described or contained herein are controlled under any of applicable local export control laws and regulations, such products must not be exported without obtaining the export license from the authorities concerned in accordance with the above law.
- No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or any information storage or retrieval system, or otherwise, without the prior written permission of SANYO Electric Co., Ltd.
- Any and all information described or contained herein are subject to change without notice due to product/technology improvement, etc. When designing equipment, refer to the "Delivery Specification" for the SANYO product that you intend to use.
- Information (including circuit diagrams and circuit parameters) herein is for example only ; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.

This catalog provides information as of September, 1999. Specifications and information herein are subject to change without notice.