

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 ($f = 20\text{Hz}$ to 20kHz)
- Member of a family of devices with power capacities from 40W to 150W
- Compact package
- High withstand voltage

Series Configuration

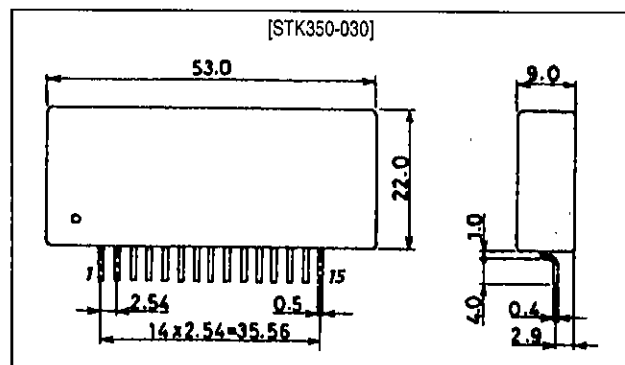
The STK350-030 is a member of a family of devices with differing output capacities.

Type No.	V_{CC} max [V]	V_{CC} [V]	THD [%]	T_c max [°C]	Power [W] ($R_L = 8\Omega$)
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



Specifications

Maximum Ratings at $T_a = 25^\circ\text{C}$

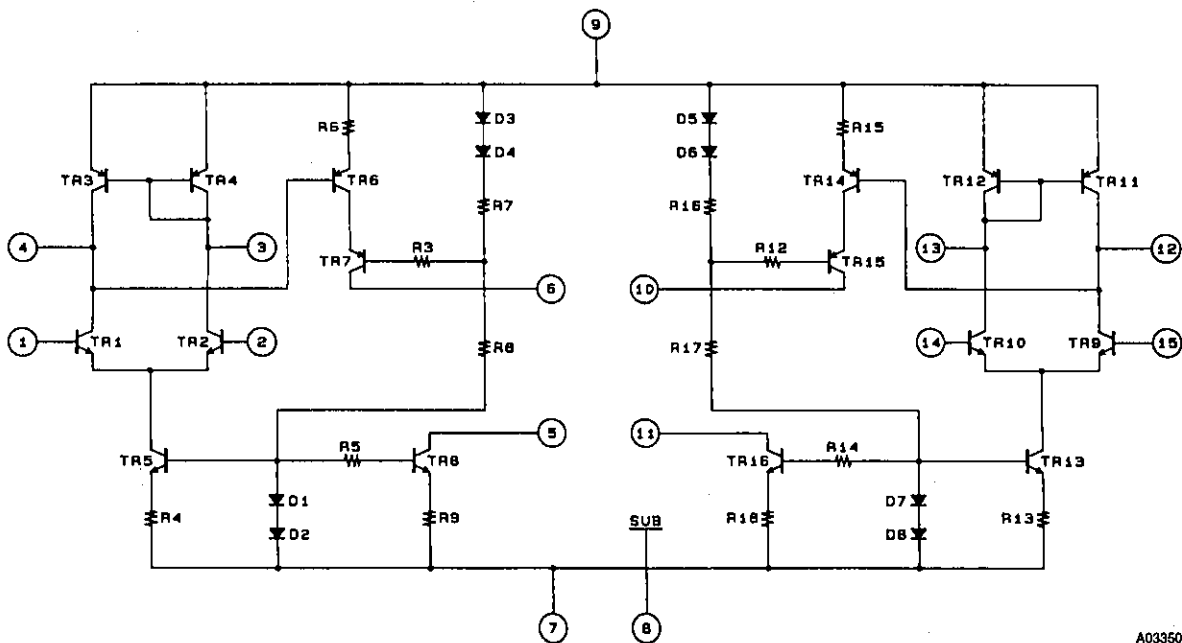
Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	$V_{CC \text{ max}}$		± 75	V
Operating substrate temperature	T_c		115	$^\circ\text{C}$
Storage temperature	T_{stg}		-30 to +115	$^\circ\text{C}$

Operating Characteristics at $T_a = 25^\circ\text{C}$, $V_G = 40\text{dB}$, specified test circuit

Parameter	Symbol	Conditions	min	typ	max	Unit
Current drain	I_{CC}	$V_{CC} = \pm 60\text{V}$	-	20	30	mA
Neutral voltage	V_N	$V_{CC} = \pm 60\text{V}$	-70	-	+70	mV
Output noise voltage	V_{NO}	$V_{CC} = \pm 60\text{V}$, $R_G = 10\text{k}\Omega$	-	-	1.0	mVrms
Input impedance	r_i	$V_{CC} = \pm 60\text{V}$, $f = 1\text{kHz}$, $V_0 = 2.83\text{V}$	-	100	-	$\text{k}\Omega$
Total harmonic distortion	THD	$V_{CC} = \pm 50\text{V}$, $f = 20\text{kHz}$, $V_0 = 28.3\text{V}$	-	-	0.005	%

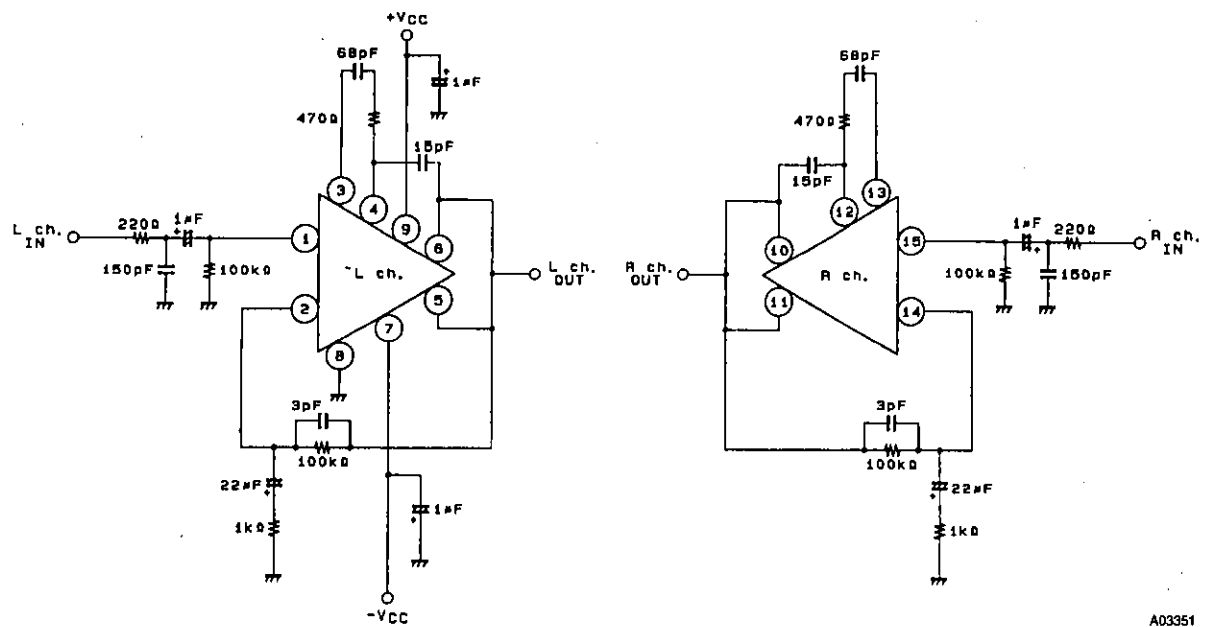
Note. All tests are made using a constant-voltage supply.

Equivalent Circuit



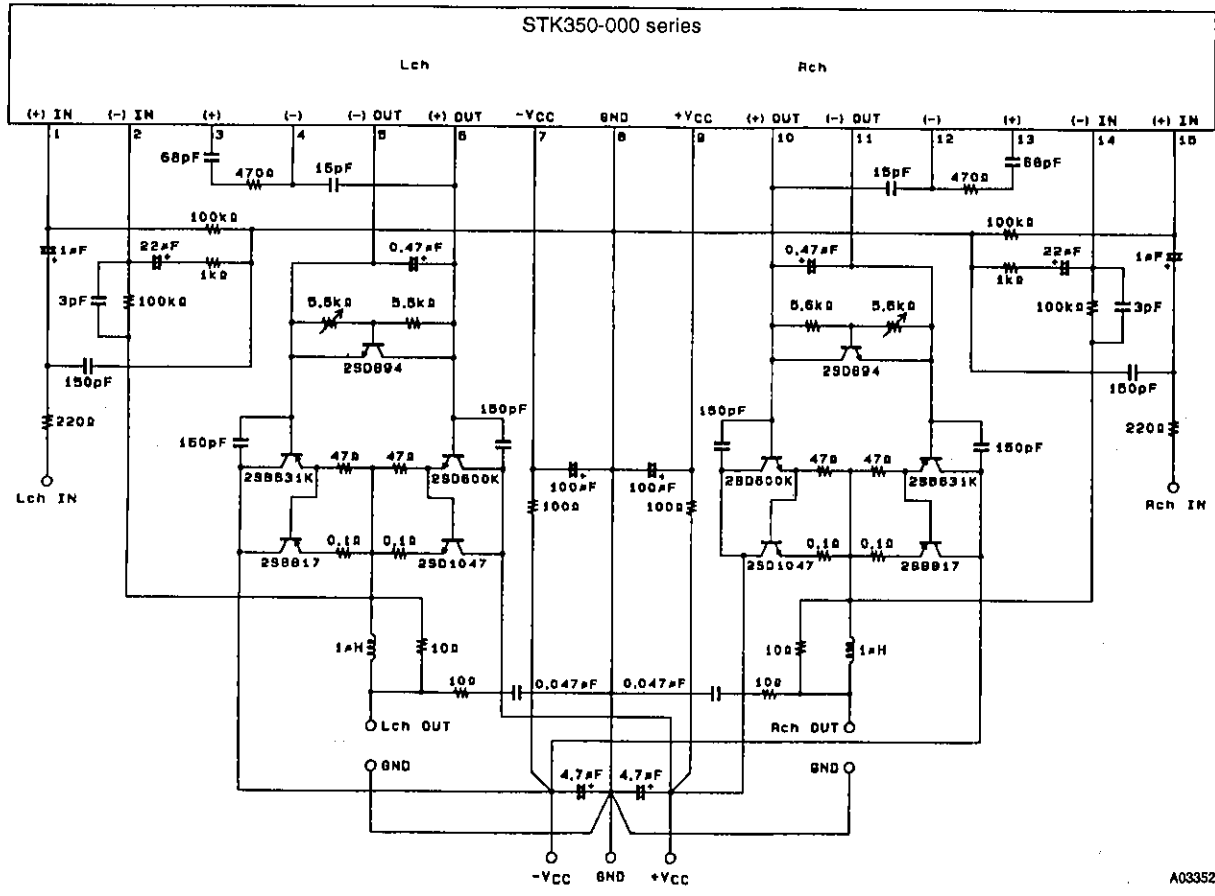
A03350

Test Circuit



A03351

Sample Application Circuit—60W/8Ω Amplifier (V_{CC} = ±41V)



A03352

- No products 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 damages, 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 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 June, 1995. Specifications and information herein are subject to change without notice.