



## 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

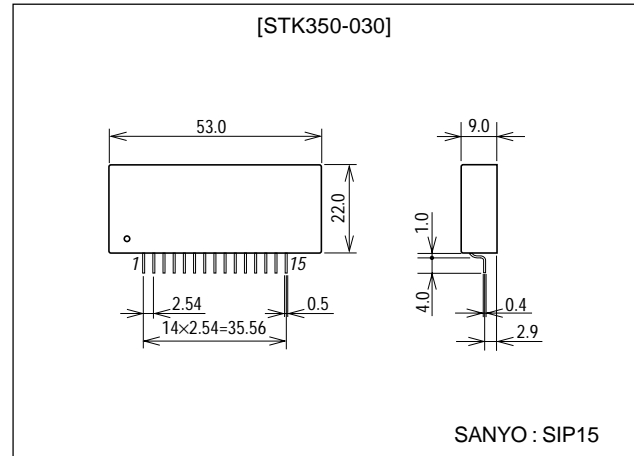
The STK350-030 is a member of a family of devices with differing output capacities.

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



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## Specifications

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

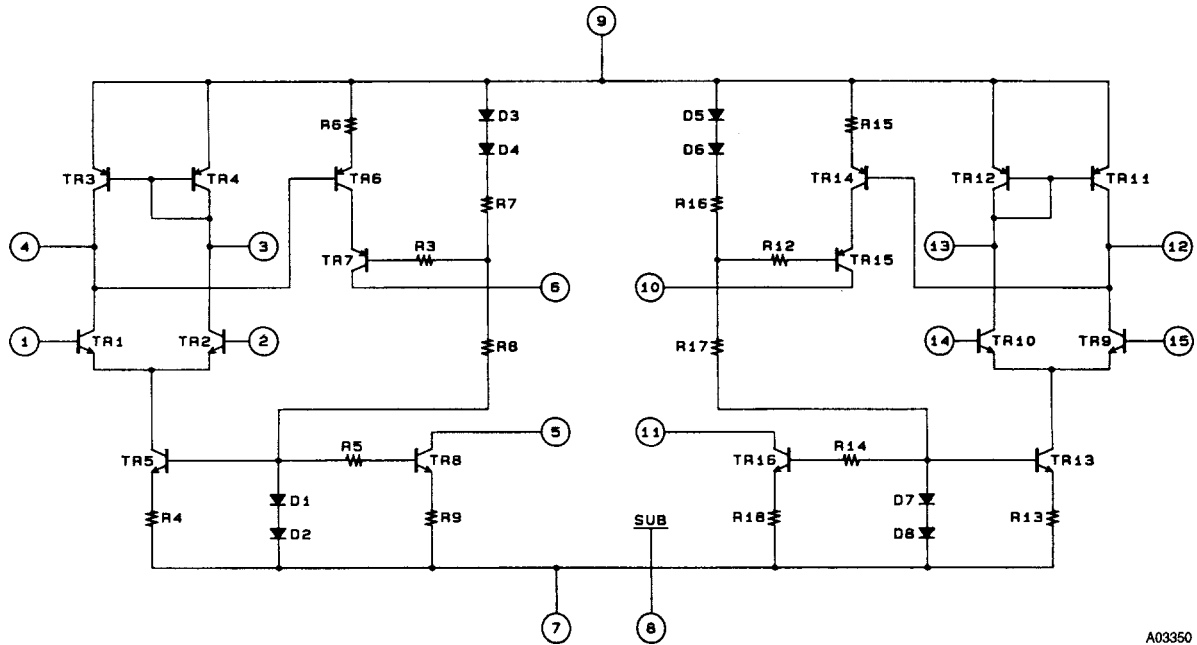
Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	$V_{CC}$ max		$\pm 75$	V
Operating substrate temperature	$T_c$		115	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-30 to +115	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
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	$r_i$	$V_{CC}=\pm 60\text{V}$ , $f=1\text{kHz}$ , $V_O=2.83\text{V}$		100		$\text{k}\Omega$
Total harmonic distortion	THD	$V_{CC}=\pm 50\text{V}$ , $f=20\text{kHz}$ , $V_O=28.3\text{V}$			0.005	%

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

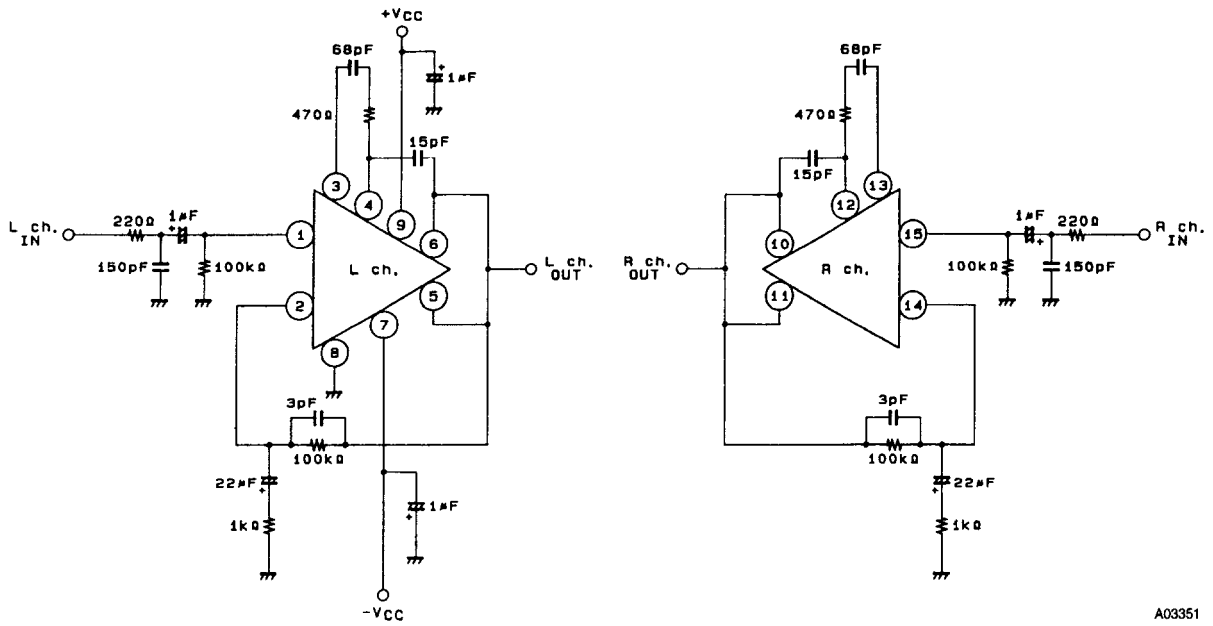
## Equivalent Circuit



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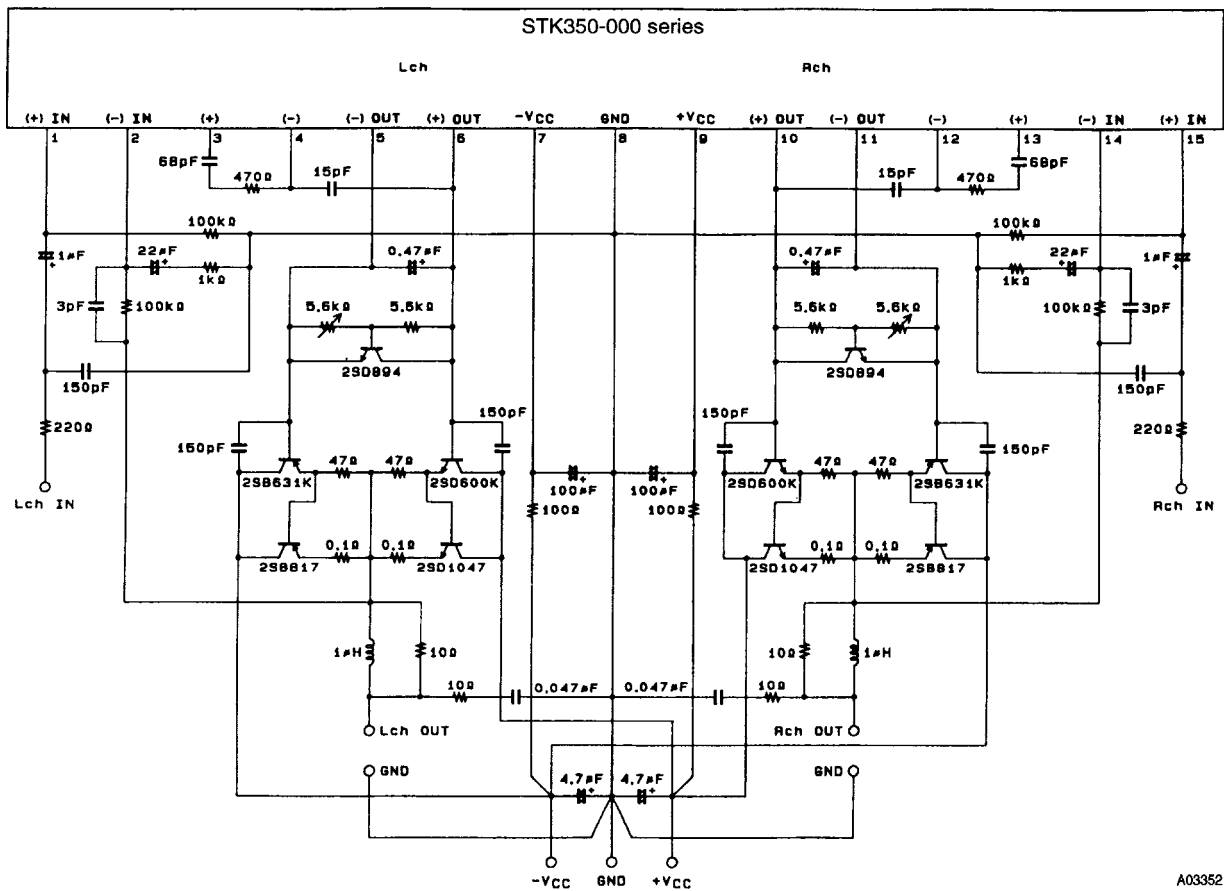
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## Test Circuit



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



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