

Ordering number: EN 5019

Thick Film Hybrid IC

<b>SANYO</b>	No. 5019	<b>STK350-030</b>
		<b>2-channel AF Voltage Amplifier (90 to 100W/channel supported)</b>

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

### Series Configuration

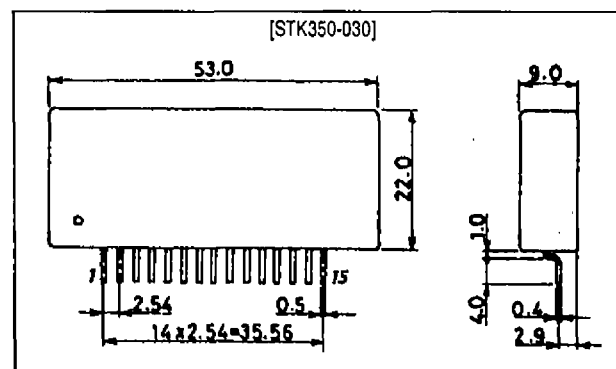
The STK350-030 is a member of a family of devices with differing output capacities.

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

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60195TH (ID) No. 5019-1/4

STK350-030

Specifications

Maximum Ratings at Ta = 25°C

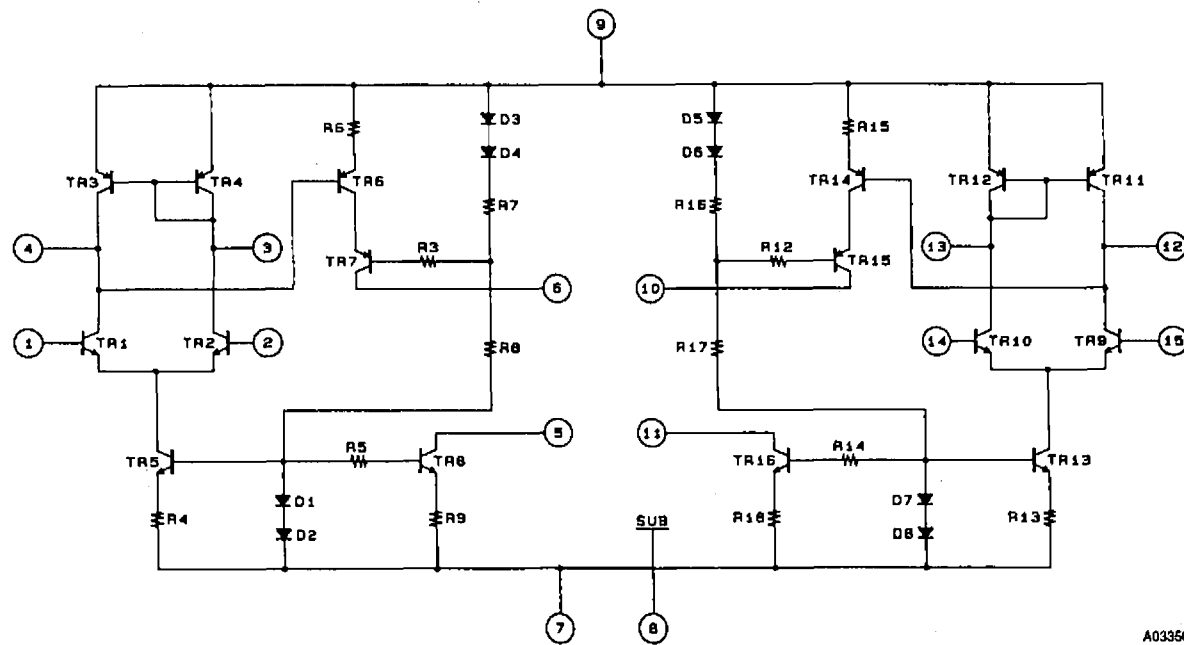
Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V <sub>CC</sub> max		±75	V
Operating substrate temperature	T <sub>c</sub>		115	°C
Storage temperature	T <sub>stg</sub>		-30 to +115	°C

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

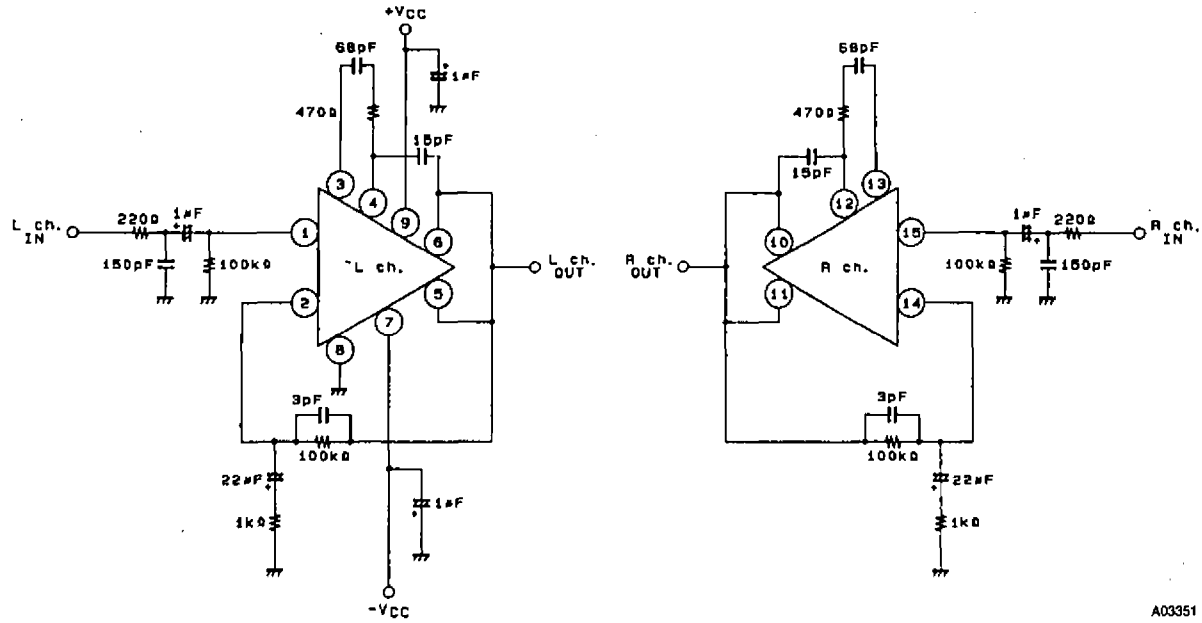
Parameter	Symbol	Conditions	min	typ	max	Unit
Current drain	I <sub>CC</sub>	V <sub>CC</sub> = ±60V	-	20	30	mA
Neutral voltage	V <sub>N</sub>	V <sub>CC</sub> = ±60V	-70	-	+70	mV
Output noise voltage	V <sub>NO</sub>	V <sub>CC</sub> = ±60V, R <sub>g</sub> = 10kΩ	-	-	1.0	mVrms
Input impedance	r <sub>i</sub>	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

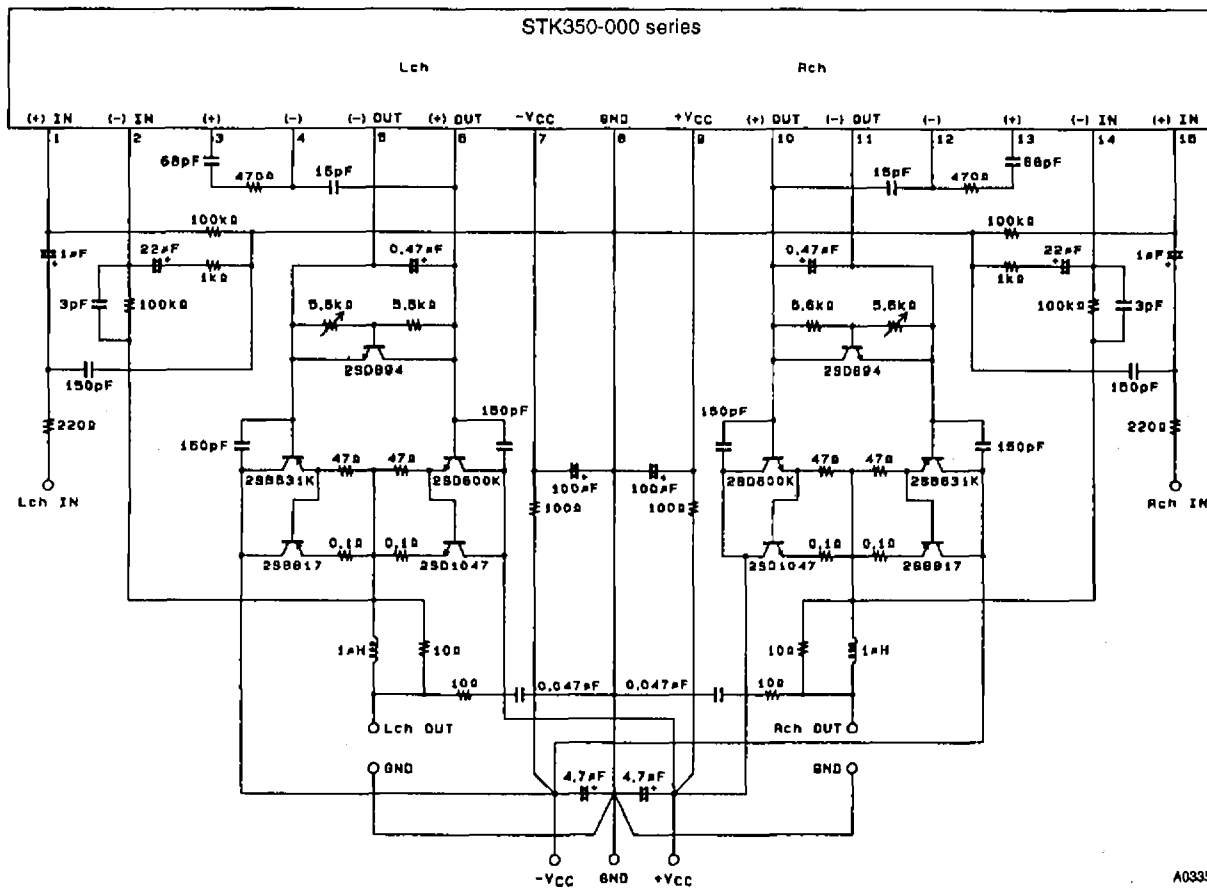


Test Circuit



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



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