

## STK350-050

# 2-Channel AF Voltage Amplifier (120 to 150W/channel supported)

#### Overview

The STK350-050 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**

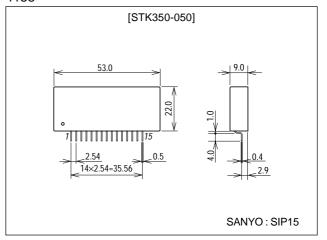
The STK350-050 is a member of a family of devices with differing output capacities.

Type No.	V <sub>CC</sub> max [V]	V <sub>CC</sub>	THD [%]	Tc 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 $Ta = 25^{\circ}C$

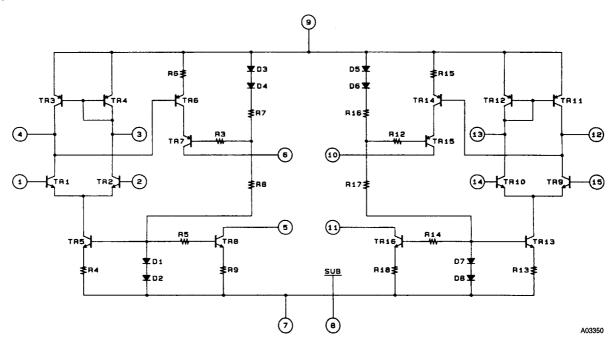
Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V <sub>CC</sub> max		±90	V
Operating substrate temperature	Tc		115	°C
Storage temperature	Tstg		-30 to +115	°C

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

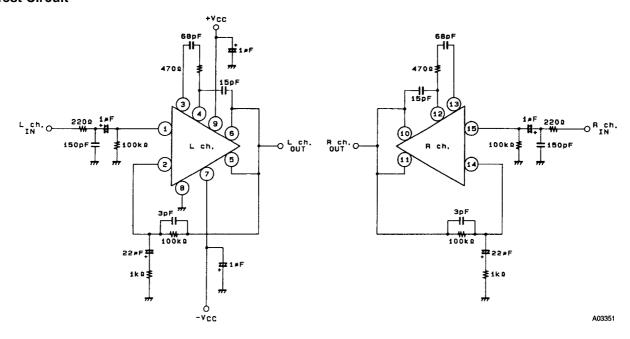
Parameter	Symbol	Conditions		Ratings		
Farameter	Symbol		min	typ	max	Unit
Current drain	lcc	V <sub>CC</sub> =±72V		20	30	mA
Neutral voltage	٧N	V <sub>CC</sub> =±72V	-70		+70	mV
Output noise voltage	V <sub>NO</sub>	$V_{CC}$ =±72V, Rg=10kΩ			1.0	mVrms
Input impedance	rį	$V_{CC}$ =±72V, f=1kHz, $V_{O}$ =2.83V		100		kΩ
Total harmonic distortion	THD	V <sub>CC</sub> =±60V, f=20kHz, V <sub>O</sub> =34.6V			0.005	%

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

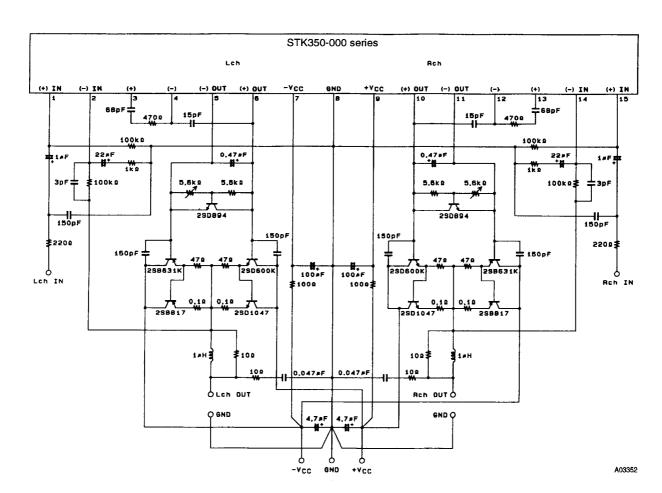
#### **Equivalent Circuit**



#### **Test Circuit**



# Sample Application Circuit-60W/8 $\Omega$ Amplifier (V<sub>CC</sub>= $\pm$ 41V)



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