



STK350-020

2-Channel AF Voltage Amplifier (80 to 90W/channel supported)

Overview

The STK350-020 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

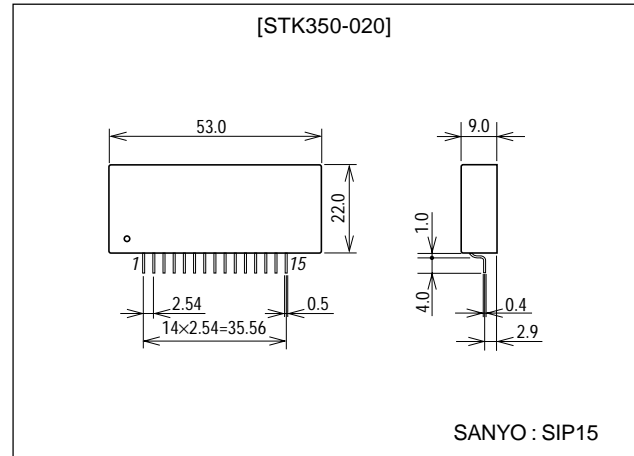
The STK350-020 is a member of a family of devices with differing output capacities.

Type No.	V _{CC} max [V]	V _{CC} [V]	THD [%]	T _c max [°C]	Power [W] (R _L =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°C

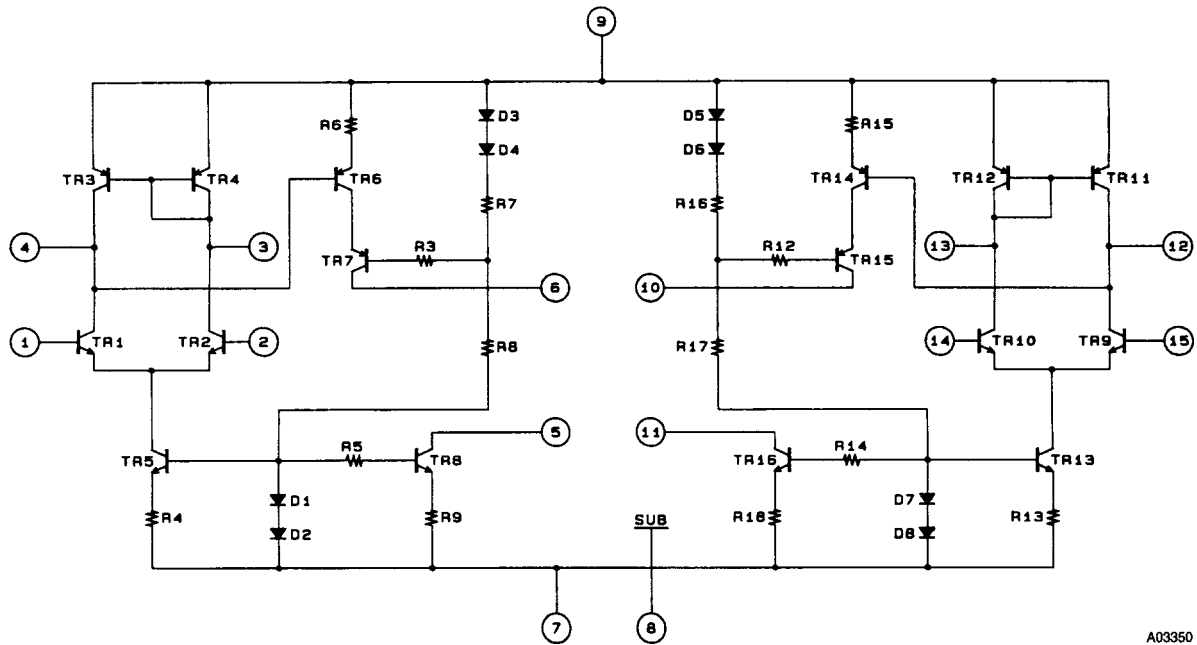
Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V _{CC} max		±65	V
Operating substrate temperature	T _c		115	°C
Storage temperature	T _{stg}		-30 to +115	°C

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

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Current drain	I _{CC}	V _{CC} =±56V		20	30	mA
Neutral voltage	V _N	V _{CC} =±56V	-70		+70	mV
Output noise voltage	V _{NO}	V _{CC} =±56V, R _g =10kΩ			1.0	mVrms
Input impedance	r _i	V _{CC} =±56V, f=1kHz, V _O =2.83V		100		kΩ
Total harmonic distortion	THD	V _{CC} =±47V, f=20kHz, V _O =25.3V			0.005	%

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

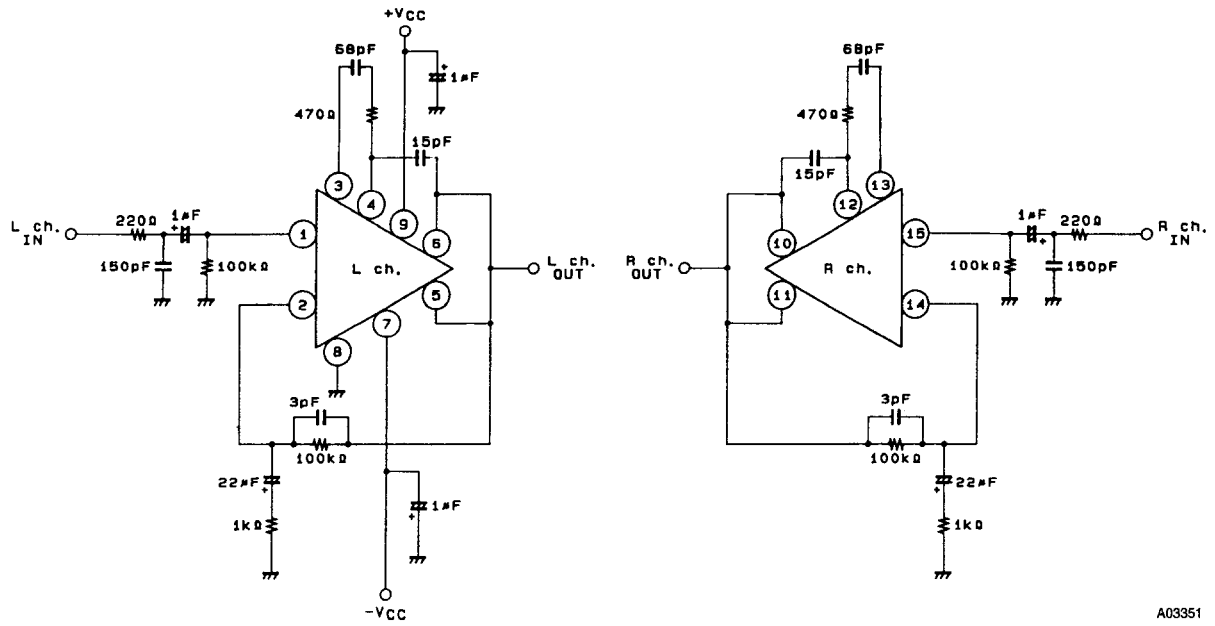
Equivalent Circuit



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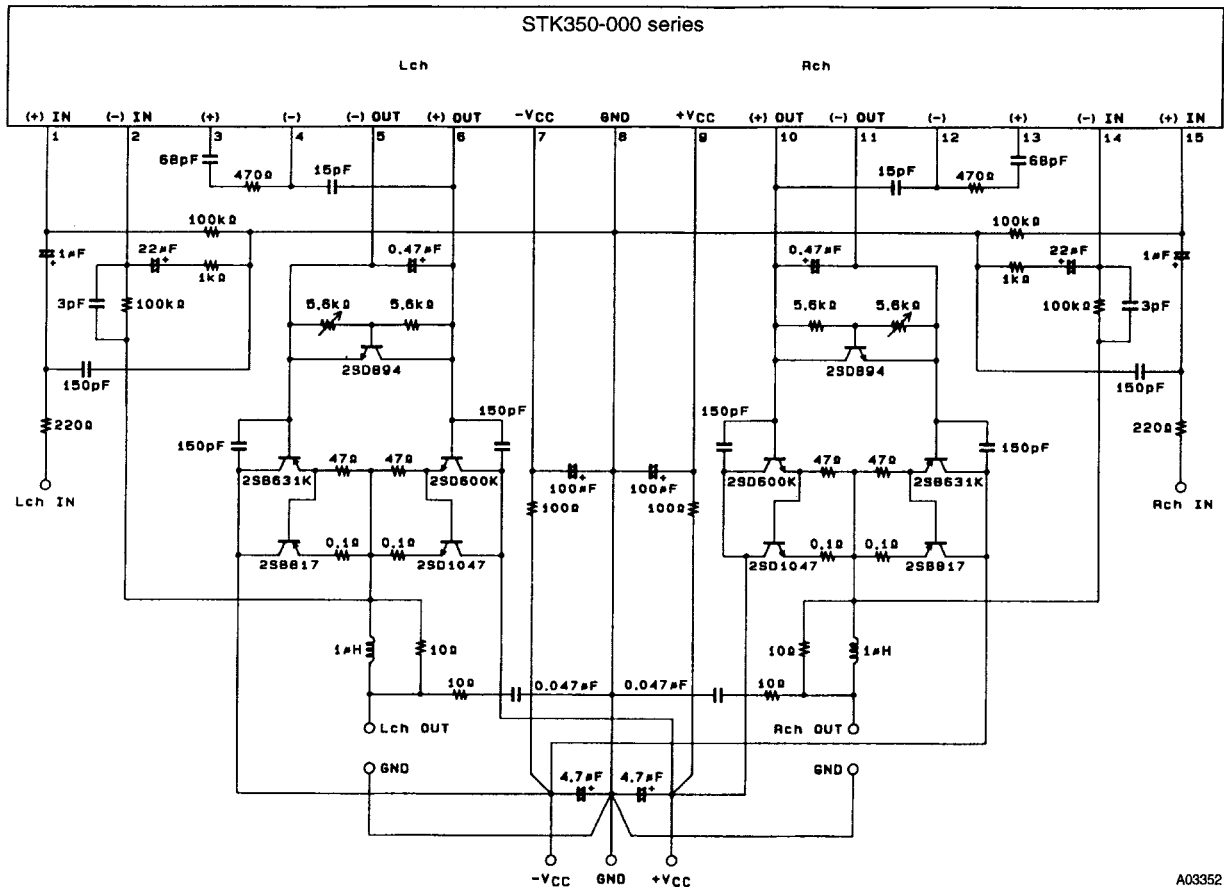
STK350-020

Test Circuit



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



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