

	No.1230	STK4372

Thick Film Hybrid Integrated Circuit
DUAL-CHANNEL 12W MIN AF POWER AMP.

Features

- . Small and slim package with 31mm height.
- . Pin compatible with STK430 series heretofore in use.
- . Capable of guaranteeing case temperature 125°C, thereby reducing heat sink.
- . Excellent cost performance.

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

			unit
Maximum Supply Voltage	V_{CCmax}	Pin 4 to 7, 12	54 V
Thermal Resistance	θ_{j-c}	One power Tr	5 °C/W
Junction Temperature	T_j		150 °C
Operating Case Temperature	T_C		125 °C
Storage Temperature	T_{stg}		-30 to +125 °C
Allowable Load Shorting Time	t_s	$V_{CC}=35V, R_L=8\text{ohm},$ $P_O=12W, f=50\text{Hz}$	2 sec

Recommended Operation Conditions at $T_a=25^\circ\text{C}$

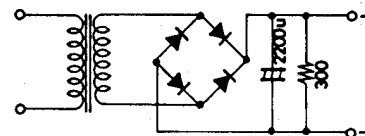
		unit
Recommended Supply Voltage	V_{CC}	35 V
Load Resistance	R_L	8 ohm

Operation Characteristics at $T_a=25^\circ\text{C}, V_{CC}=35V, R_L=8\text{ohm}, R_g=600\text{ohm}, V_G=40\text{dB}$, at specified test circuit (based on application circuit example).

			min	typ	max	unit
Quiescent Current	I_{cco}	$V_{CC}=39V$	20	60	120	mA
Output Power	$P_O(1)$	THD=1.0%, $f=1\text{kHz}$	12			W
	$P_O(2)$	THD=1.0%, $f=30\text{Hz to } 20\text{kHz}$	6			W
Total Harmonic Distortion	THD	$P_O=0.1W, f=1\text{kHz}$			0.3	%
Frequency Characteristic	f_L, f_H	$P_O=0.1W, -3\text{dB}$	20 to 100k			Hz
Input Impedance	r_i	$P_O=0.1W, f=1\text{kHz}$	110k			ohm
Output Noise Voltage	V_{NO}	$V_{CC}=39V, R_g=10\text{kohm}$			0.8	mV _{rms}

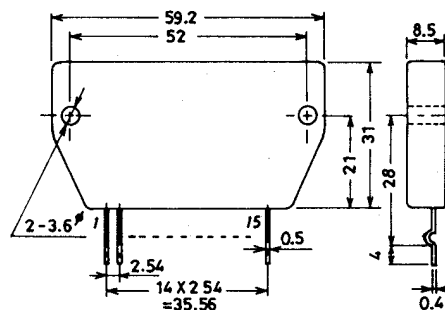
(Note). Unless otherwise specified for the power supply at the time of test, use the constant voltage power supply.

- . When testing the available time of load shorted and output noise voltage, use the specified transformer as shown right.
- . The output noise voltage is the peak value on the mean value indicating rms reading (VTVM), and should not involve impulse noise.



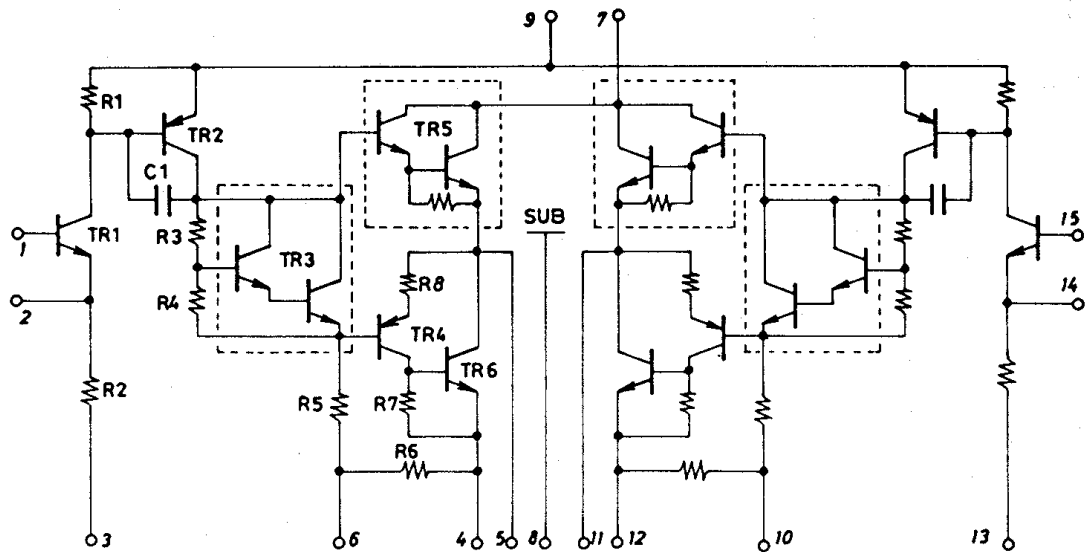
Specified transformer power supply
(Equivalent to SANSUI RP-22)

Case Outline 4033 (unit:mm)

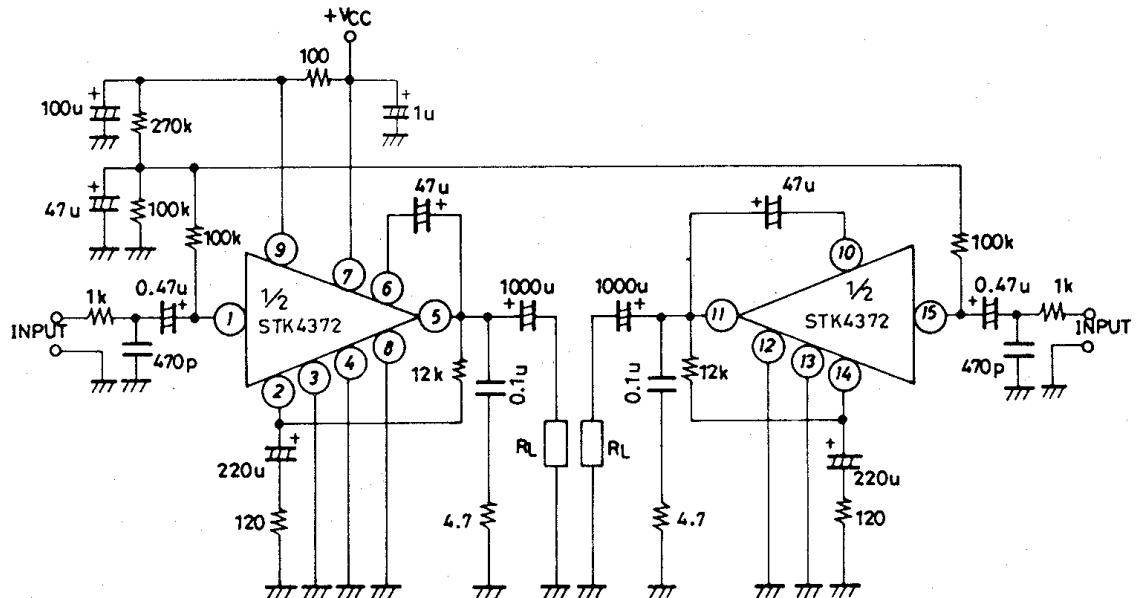


These specifications are subject to change without notice.

Equivalent Circuit



Application Circuit Example : 12W min 2-channel AF Power Amplifier



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