



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	$\theta_{j-c}$	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	$t_s$	$V_{CC}=35V, R_L=8ohm,$ $P_O=12W, f=50Hz$	2 sec

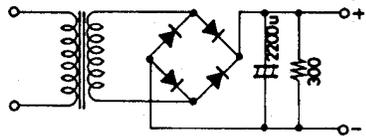
**Recommended Operation Conditions at  $T_a=25^\circ\text{C}$**

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

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

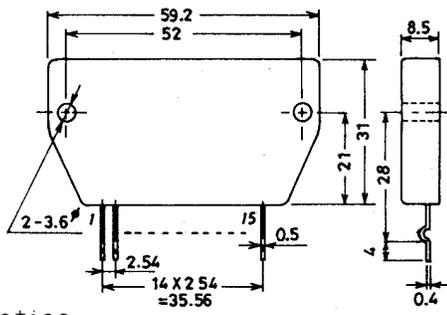
			min	typ	max	unit
Quiescent Current	$I_{cco}$	$V_{CC}=39V$	20	60	120	mA
Output Power	$P_O(1)$	THD=1.0%, f=1kHz	12			W
	$P_O(2)$	THD=1.0%, f=30Hz to 20kHz	6			W
Total Harmonic Distortion	THD	$P_O=0.1W, f=1kHz$			0.3	%
Frequency Characteristic	$f_L, f_H$	$P_O=0.1W, -3dB$	20 to 100k			Hz
Input Impedance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

- (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.



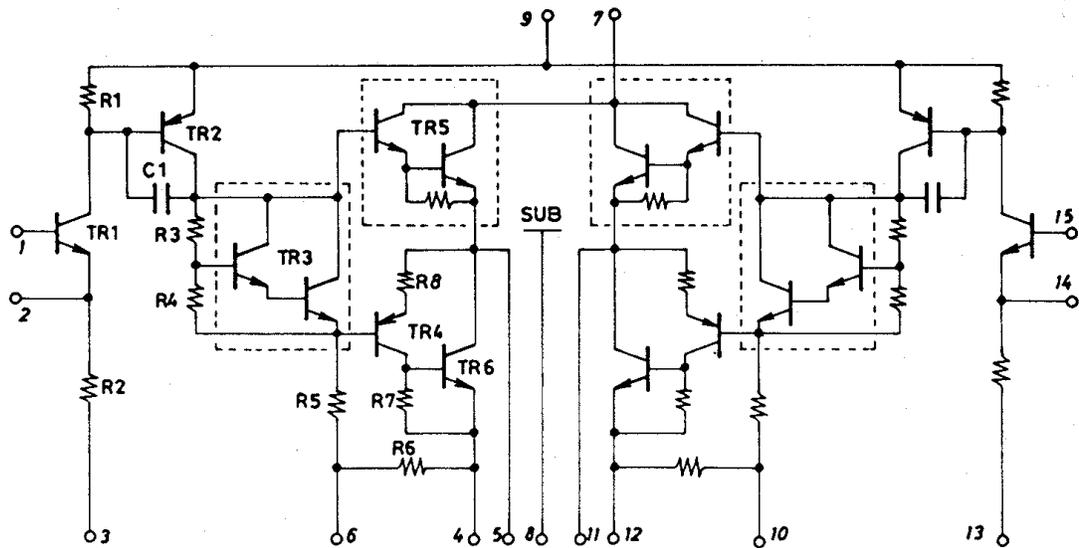
Specified transformer power supply (Equivalent to SANSUI RP-22)

**Case Outline 4033 (unit:mm)**

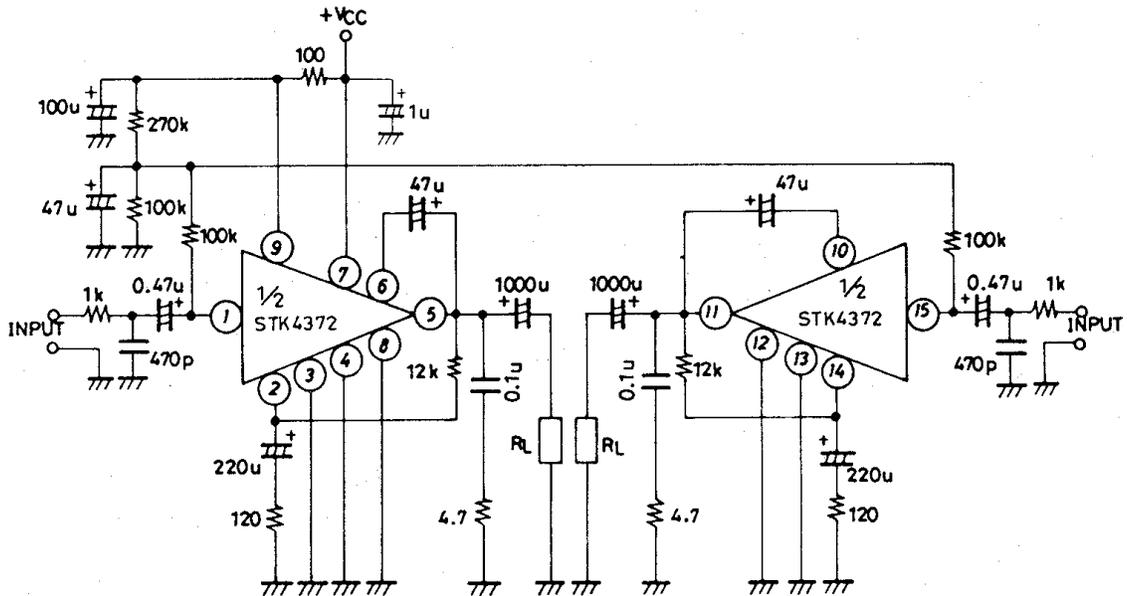


These specifications are subject to change without notice.

Equivalent Circuit



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



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