



No.1625



**STK4913**

Thick Film Hybrid Integrated Circuit  
2-CHANNEL 50W MIN AF POWER AMP  
(DUAL-SUPPLY)

**Features**

- . Contains the emitter follower circuit for upgrading.
- . Case temperature 125°C is guaranteed, thereby greatly reducing the heat sink.
- . Pop noise generated at the time of power ON/OFF can be rejected by a muting circuit connected externally.

**Maximum Ratings at Ta=25°C**

		unit
Maximum Supply Voltage	$V_{CCmax}$	±50 V
Thermal Resistance	$\theta_{j-c}$	1.5 °C/W
Junction Temperature	$T_j$	150 °C
Operating Case Temperature	$T_c$	125 °C
Storage Temperature	$T_{stg}$	-30 to +125 °C
Available Time for Load Shorted	$t_s$	$V_{CC}=\pm 35V, R_L=8\text{ohm}, P_o=50W, f=50\text{Hz}$ 2 sec

**Recommended Operating Conditions at Ta=25°C**

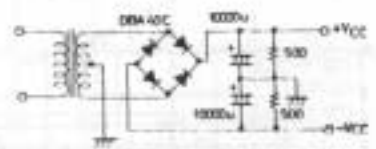
		unit
Recommended Supply Voltage	$V_{CC}$	±35 V
Load Resistance	$R_L$	8 ohm

**Operating Characteristics at Ta=25°C,  $V_{CC}=\pm 35V, R_L=8\text{ohm}$ (non-inductive),  $R_g=600\text{ohm}$ ,  $V_G=40\text{dB}$ , at specified Test Circuit(based on Sample Application Circuit)**

		min	typ	max	unit
Quiescent Current	$I_{cco}$	$V_{CC}=\pm 42V$	35	70	120 mA
Output Power	$P_o$	THD=0.02%, $f=20\text{Hz}$ to $20\text{kHz}$	50		W
Total Harmonic Distortion	THD	$P_o=1W, f=20\text{Hz}$ to $20\text{kHz}$		0.02	%
Frequency Response	$f_L, f_H$	$P_o=1W, +0$ dB	10	to 100k	Hz
Input Resistance	$r_i$	$P_o=1W, f=1\text{kHz}$	32k		ohm
Output Noise Voltage	$V_{NO}$	$V_{CC}=\pm 42V, R_g=10\text{kohm}$		1.2	mVrms
Output Middle-Point Voltage	$V_N$	$V_{CC}=\pm 42V$	-70	0	+70 mV

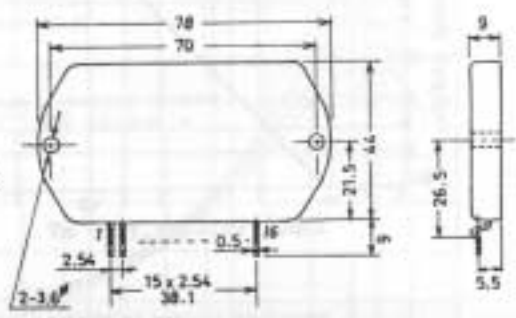
**(Note)**

- . For power supply at the time of test, use a constant-voltage power supply unless otherwise specified.
- . For measurement of the available time for load shorted and output noise voltage, use the specified transformer power supply shown right.
- . The output noise voltage is represented by the peak value on rms scale (VTVM) of average value indicating type. For AC power supply, use an AC stabilized power supply (50Hz) to eliminate the effect of flicker noise in AC primary line.



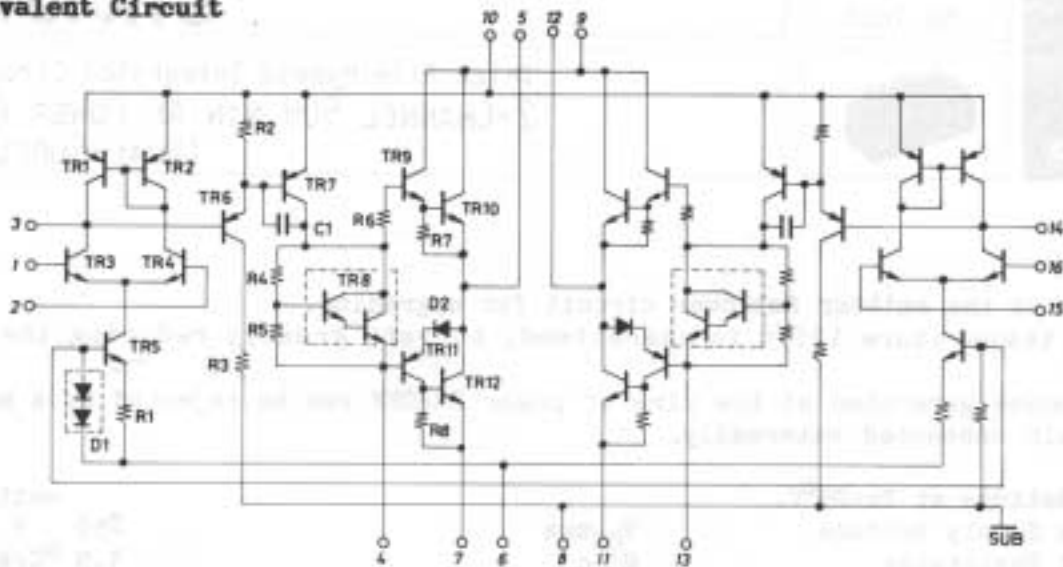
Specified transformer power supply (Equivalent to MG200)

**Case Outline 4029 (unit:mm)**

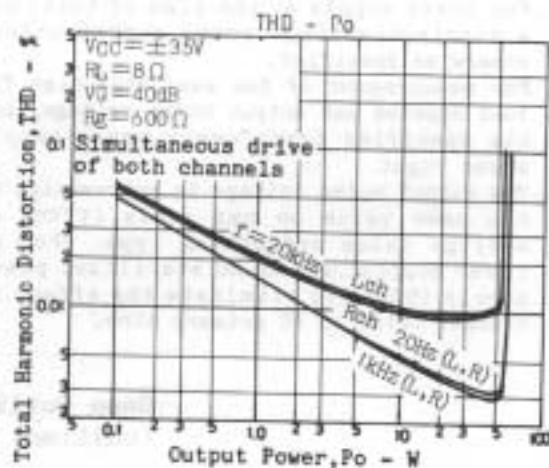
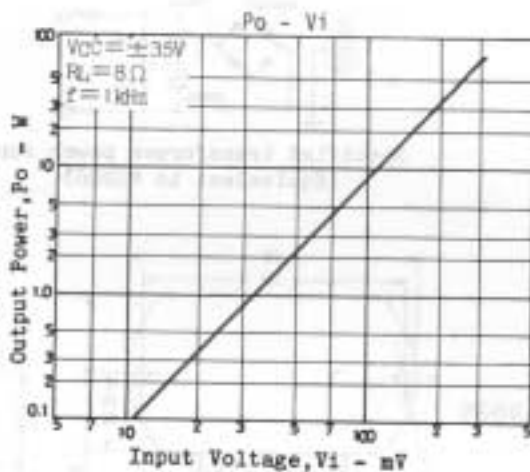
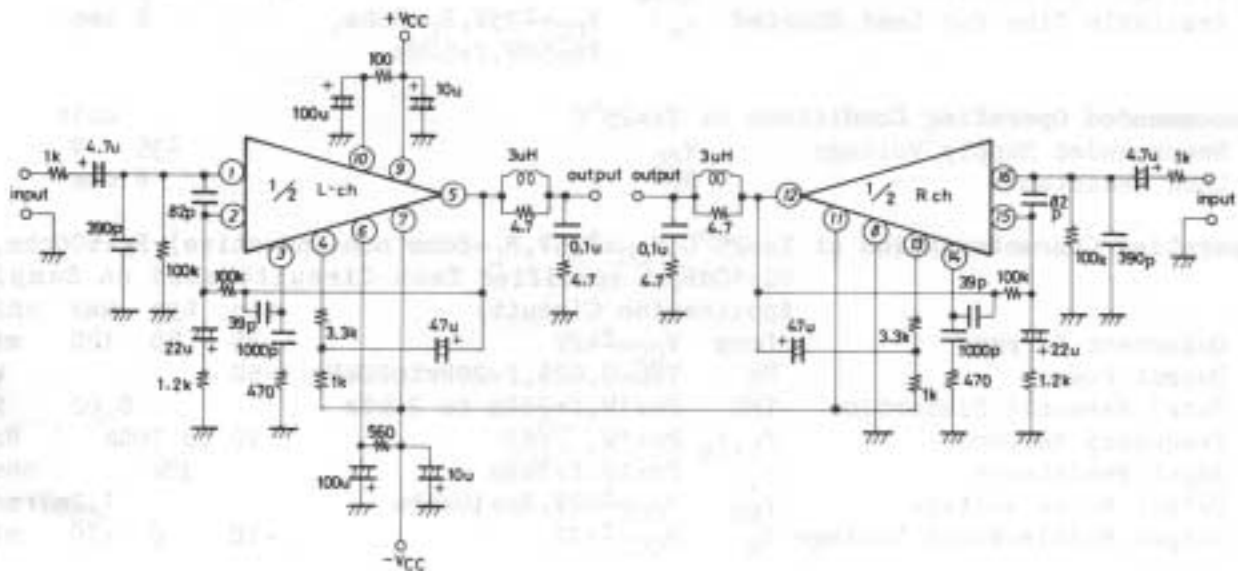


These specifications are subject to change without notice.

Equivalent Circuit



Sample Application Circuit : 50W min 2-channel AF Power amp



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