

MODEL 5008 BALANCED TRANSFORMERLESS AMPLIFIER

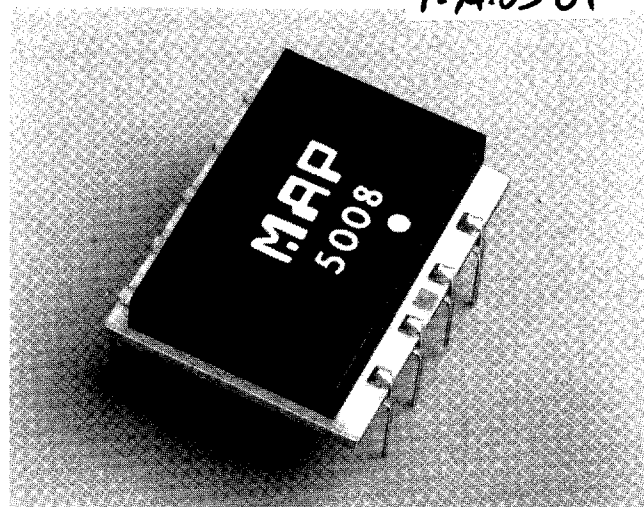
T-74.05-01

APPLICATIONS

- Balanced line inputs
- Differential line amplifiers
- Balanced combining amps.
- Bridging line amplifiers
- Console line inputs
- Stereo line amplifiers

FEATURES

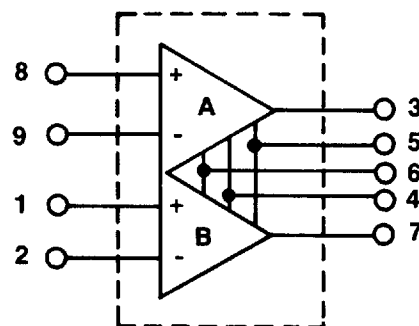
- Dual channel amplification
- Up to 40 dB gain
- -80 dB crosstalk max. at 20 kHz
- Equivalent input noise -112 dBm
- High output (20 dBm) into 600 ohms
- Low distortion (.05 percent)
- High input impedance
- Low output impedance



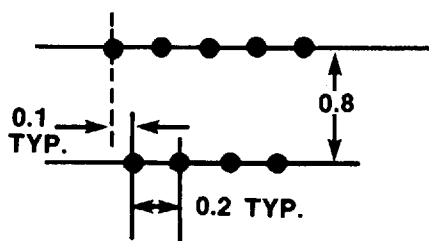
The MAP Model 5008 is a dual balanced transformerless amplifier packaged in the familiar MAP hybrid assembly. The Model 5008 may be used in a wide variety of applications by simple addition of external resistors or interconnections. It is suitable for use in audio frequency circuits with the most stringent requirements. Some typical applications are shown on the reverse side.

PERFORMANCE SPECIFICATIONS

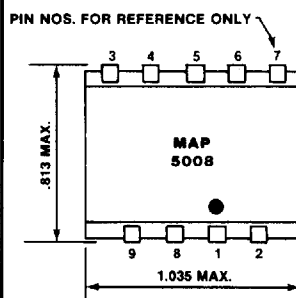
Maximum Gain 40 dB
 Full Power Out +20 dBm
 Frequency Response ... 20-20,000 Hz $\pm$ 0.25 dB
 Maximum Distortion05% max. 20-20,000 Hz
 Full Power Bandwidth... 140 kHz
 Equivalent Input Noise .. -112 dBm
 Crosstalk 80 dB @ 20 kHz
 Input Impedance 17K, Resistive
 Vos 3 millivolt, max.
 Slew Rate 9V/usec.
 Common Mode Voltage $\pm$ 13 VDC, maximum
 Supply Voltage Range .. $\pm$ 12 - $\pm$ 15 VDC
 Maximum Current $\pm$ 16 ma



SCHEMATIC



PIN SPACING



PIN. NO.	FUNCTION
1	+ IN CH. B
2	- IN CH. B
3	OUT CH. A
4	V-
5	COM.
6	V+
7	OUT CH. B
8	+ IN CH. A
9	- IN CH. A
MNTG HOLES RECOMMENDED .032 $\pm$.003 DIA	

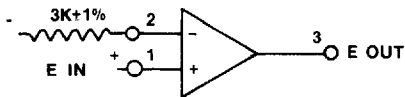
PIN CALLOUT



MODULAR AUDIO PRODUCTS

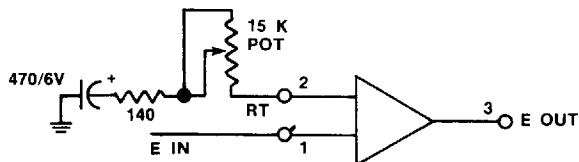
MODULAR DEVICES INC • BROOKHAVEN R&D PLAZA • ONE RONED ROAD • SHIRLEY, NEW YORK 11967
 CALL 1-800-333-7697 • 516-345-3100 • FAX 516-345-3106

TYPICAL AMPLIFIER APPLICATIONS & SPECIFICATIONS



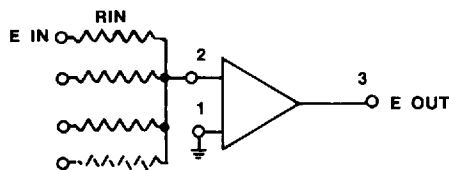
DIFFERENTIAL AMPLIFIER

13 dB gain
6K diff. input impedance



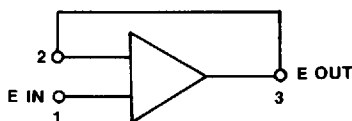
SINGLE ENDED, NON INVERTING AMPLIFIER

Adjustable gain = 0 dB to 40 dB
17 K input impedance
Gain = $20 \log_{10} \left(\frac{14K}{R_t + 140} \right) (E IN)$



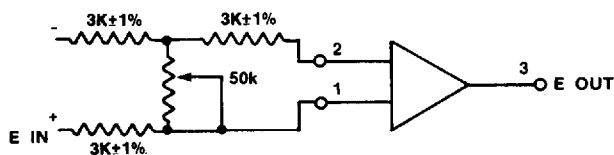
COMBINING (SUMMING) AMPLIFIER

Gain and input Z Determined by R_{IN} Gain = $20 \log_{10} \left(\frac{14K}{R_{IN}} \right)$



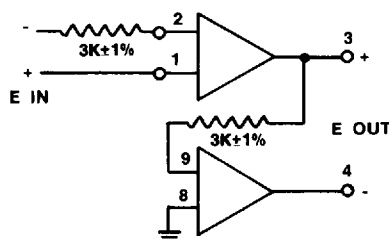
VOLTAGE FOLLOWER (BUFFER)

$E IN = E OUT$
High input Z : 17K
Low output Z : 1Ω, max. } IDEAL FOR DRIVING SEVERAL HI-Z INPUTS FROM LOW Z SOURCE



DIFFERENTIAL AMPLIFIER

With gain control
Max. gain = 13dB
Input Z = 6KΩ, differential



DIFFERENTIAL AMPLIFIER

Diff. IN - Diff. OUT
13 dB gain
+26 dB max. output