

ECG804

DUAL AUDIO AMPLIFIER — 2 WATTS PER CHANNEL

Features:

- res:
 Low Distortion
 Low Quiescent Current
 Self Centering Bias
 High Input Impedance
 High Open Loop Gain
 High Peak Output Current
 Internal Current Limiting
 Thermal Shutdown
 High Changel Spazzation

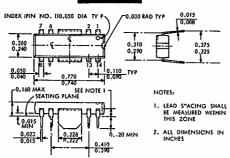
- High Channel Separation
- Internal Compensation Network Minimum External Components

THE TYPE ECG804 Dual Audio Amplifier is a linear monolithic integrated circuit designed primarily for low cost audio amplifiers in phonograph and radio applications. It is also ideally suited for industrial applications requiring high power output and reliable performance.

This versatile power amplifier can deliver 2 watts per channel of continuous power and may be operated over a supply voltage range of 9 to 26 volts. Because of the low output impedance, the amplifier can drive either an 8 ohm or 16 ohm load.

The ECG804 is available in an 8-lead plastic package with two heatsink tabs for heat transfer to a printed circuit board. The tabs are designed to allow an external heat-sink to be readily attached to the tabs during flow soldering of the printed wiring board.

CUT I



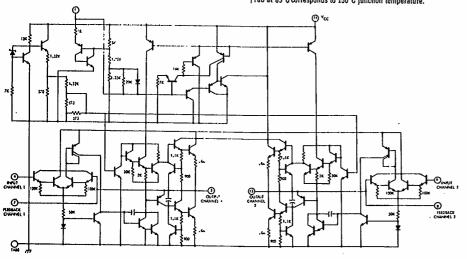
ABSOLUTE MAXIMUM RATINGS

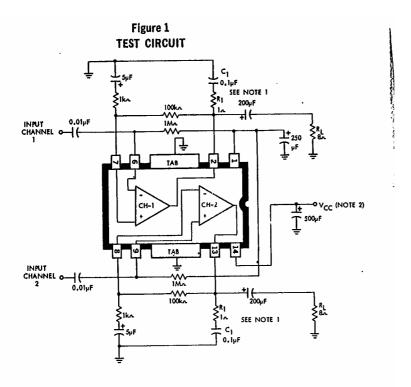
Supply Voltage, V _{cc}	26V
Peak Output Current	1.2A
Package Dissipation (Tab at +95°	C)†6W*
Operating Temperature, T	25°C to +70°C
Storage Temperature, Ts	
*Decate at the rate of 1 DW/1100 at tomas	selures about orgo

*Derate at the rate of 1.0W/11°C at temperatures above +85°C.

Thermal Resistance: Junction to Still Air, 91A = 50°C/W
Junction to Case, 61C = 11°C/W
†Tab at 85°C corresponds to 150°C junction temperature.

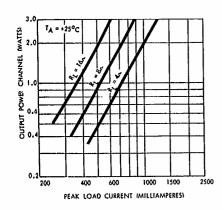
CIRCUIT SCHEMATIC

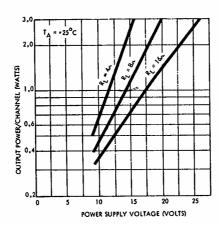




NOTES:

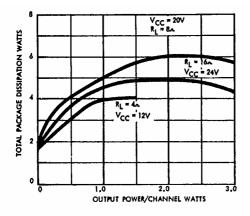
- Compensation network: R1, C1 values are dependent upon circuit layout.
 When an unregulated supply voltage is used, the actual voltage present at pin 14 during full signal conditions should not drop below the nominal supply voltage level if full power output is to be maintained.
 Closed loop gain should be limited to 30dB min. to 60dB max, to maintain stable circuit operation.





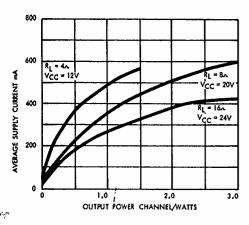
OUTPUT POWER/CHANNEL AS A FUNCTION OF PEAK LOAD CURRENT OUTPUT POWER/CHANNEL
AS A FUNCTION OF POWER SUPPLY VOLTAGE

ECG804

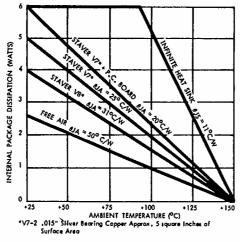


INTERNAL PACKAGE DISSIPATION AS A FUNCTION OF OUTPUT POWER/CHANNEL

Single channel operating only. If both channels are operating simultaneously, the total package dissipation will be the sum total of each individual channel.



SUPPLY CURRENT AS A FUNCTION OF OUTPUT POWER/CHANNEL



*V8-2 .015" Silver Bearing Copper with 60/40 Solder, Approx. 2 Square Azea

P.C. BOARD IS 25" x 25"

PACKAGE HEAT DISSIPATION USING "STAVER" HEAT SINKS

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ECG804