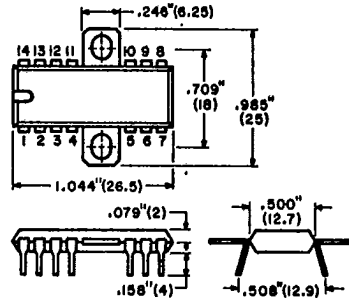


ECG[®] Semiconductors

ECG1222

AF POWER AMPLIFIER

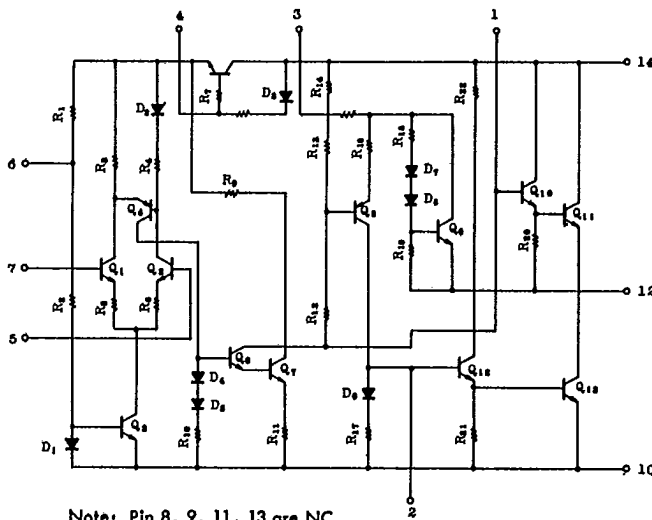
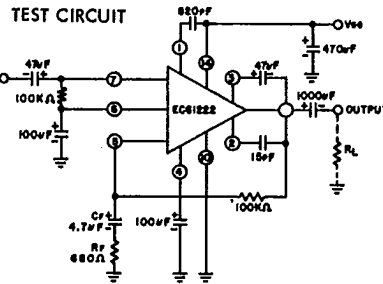
- LOW NOISE CHARACTERISTIC
- EXCELLENT RIPPLE REJECTION



ECG1222 is a linear integrated circuit designed for use as a 4.2 W Audio Power Amplifier. It is used in automotive output power applications. Typical operating characteristics are: $V_{CC} = 13.2 V$, $R_L = 4 \Omega$.

MAXIMUM RATINGS / $T_a = 25^\circ C$

| Characteristic | Symbol | Rating | Unit |
|-----------------------|--------------------|-------------|------------|
| Supply Voltage | V_{CC} | 18 | V |
| Output Peak Current | $I_O(\text{Peak})$ | 1.8 | A |
| Power Dissipation | P_D | 5.0 | W |
| Operating Temperature | T_{opg} | -20 to +75 | $^\circ C$ |
| Storage Temperature | T_{stg} | -55 to +150 | $^\circ C$ |



Note: Pin 8, 9, 11, 13 are NC.

ELECTRICAL CHARACTERISTICS / $V_{CC} = 12.5 \text{ V}$, $R_L = 4 \Omega$, $R_g = 600 \Omega$, $R_f = 680 \Omega$,
 $f = 1 \text{ kHz}$, $T_a = 25^\circ\text{C}$ unless otherwise specified

T-74-05-01

| Characteristic | Symbol | Test Condition | Min. | Typ. | Max. | Unit |
|---------------------------|-----------|--|------|------|------|------------|
| Quiescent Current | I_{CCQ} | | -- | -- | 60 | mA |
| | | $V_{CC} = 18 \text{ V}$ | -- | -- | 60 | |
| Output Power | P_{OUT} | THD = 10% | 3.0 | 3.8 | -- | W |
| | | $V_{CC} = 13.2 \text{ V}$, THD = 10% | -- | 4.2 | -- | |
| Maximum Output Power | P_{OM} | $V_{CC} = 13.2 \text{ V}$ | -- | 6.0 | -- | W |
| Total Harmonic Distortion | THD | $P_{out} = 1 \text{ W}$ | -- | -- | 1.5 | % |
| Voltage Gain | G_V | $R_f = 0$, $C_f = 33 \mu\text{F}$ | 55 | -- | 67.5 | dB |
| | | $R_f = 680 \Omega$ | -- | 42 | -- | |
| Input Resistance | R_{IN} | | -- | 70 | -- | k Ω |
| Output Noise Voltage | V_{NO} | $R_g = 10 \text{ k}\Omega$ $BW = 50 \text{ to } 20 \text{ kHz}$ | -- | -- | 3.5 | mV |

