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## NTE1042

### Integrated Circuit

### 3 Stage FM IF Amplifier

#### Absolute Maximum Ratings:

Supply Voltage,  $V_{CC}$  ..... 20V  
 Input Voltage,  $V_{IN}$  .....  $\pm 3V$   
 Power Dissipation,  $P_D$  ..... 300mW  
 Operating Temperature Range,  $T_{opr}$  .....  $-20^{\circ}$  to  $+70^{\circ}C$   
 Storage Temperature Range,  $T_{stg}$  .....  $-55^{\circ}$  to  $+125^{\circ}C$

**Electrical Characteristics:** ( $V_{CC} = 7.5V$ ,  $T_A = +25^{\circ}C$  unless otherwise specified)

| Parameter           | Symbol       | Test Conditions                | Min | Typ  | Max | Unit      |
|---------------------|--------------|--------------------------------|-----|------|-----|-----------|
| Total Power         | $P_T$        | $f = 10.7MHz$                  | 80  | –    | 175 | mA        |
| Input Resistance    | $R_i$        |                                | –   | 3.7  | –   | $k\Omega$ |
| Input Capacitance   | $C_i$        |                                | –   | 9.2  | –   | pF        |
| Output Resistance   | $R_o$        |                                | –   | 31.5 | –   | $k\Omega$ |
| Output Capacitance  | $C_o$        |                                | –   | 4.2  | –   | pF        |
| Voltage Gain        | $G_v$        |                                | 55  | 61   | –   | dB        |
| Input Limit Voltage | $V_{i(Lim)}$ | $V_{CC} = 10V$ , $f = 10.7MHz$ | –   | 300  | 450 | $\mu V$   |

**Pin Connection Diagram**

