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NTE1563 Integrated Circuit AM Tuner, AM/FM IF Amp

Description:

The NTE1563 is a silicon monolithic integrated circuit in a 16-Lead DIP type package designed for AM/FM radios and cassette tape recorders with an AM/FM radio. The NTE1563 contains an AM tuner and FM-IF amplifiers.

Features:

- Wide Operating Voltage: $V_{CC} = 2.5V$ to $6.0V$
- Excellent Low Voltage Characteristics
- High Gain FM-IF Amplifiers
- The AM Stage is Composed of a Mixer, a Local Oscillator, an IF Amplifier and an AGC Circuit
- The AM Stage has an Excellent AGC Characteristic and Low Distortion.

Absolute Maximum Ratings: ($T_A = +25^\circ C$ unless otherwise specified)

Supply Voltage, V_{CC} 9V
 Package Dissipation ($T_A = +75^\circ C$), P_D 350mW
 Operating Temperature Range, T_{opr} -20° to $+75^\circ C$
 Storage Temperature Range, T_{stg} -40° to $+125^\circ C$

Recommended Operating Conditions: ($T_A = +25^\circ C$ unless otherwise specified)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|----------------|----------|-----------------|-----|-----|-----|------|
| Supply Voltage | V_{CC} | | 2.5 | 4.0 | 6.0 | V |

Electrical Characteristics: ($T_A = +25^\circ C$ unless otherwise specified)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|--------------------|--------------|---|-----|------|------|------|
| Circuit Current | $I_{CC(AM)}$ | No Signal (AM) | 4.5 | 8.0 | 11.5 | mA |
| Voltage Gain (MIX) | $A_{V(MIX)}$ | $f = 1MHz, R_G = 50\Omega, R_L = 1k\Omega$ (AM) | 7.5 | 11.5 | 15.5 | dB |
| Voltage Gain (IF) | $A_{V(IF)}$ | $f = 455kHz, R_G = 50\Omega, R_L = 330\Omega$ (AM) | 44 | 50 | 56 | dB |
| Circuit Current | $I_{CC(FM)}$ | No Signal (FM) | 5 | 9 | 13 | mA |
| Voltage Gain (IF1) | $A_{V(IF1)}$ | $f = 10.7MHz, R_G = 50\Omega, R_L = 1k\Omega$ (FM) | 38 | 42 | 46 | dB |
| Voltage Gain (IF2) | $A_{V(IF2)}$ | $f = 10.7MHz, R_G = 50\Omega, R_L = 330\Omega$ (FM) | 27 | 33 | 39 | dB |

Pin Connection Diagram

