



**ELECTRONICS, INC.**  
 44 FARRAND STREET  
 BLOOMFIELD, NJ 07003  
 (973) 748-5089

## 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,  $T_{opr}$  .....  $-20^\circ$  to  $+75^\circ C$   
 Storage Temperature Range,  $T_{stg}$  .....  $-40^\circ$  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

