

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

AM Local OSC	1	16	AM Con Input
FM IF Input (1)	2	15	AM Con Output
GND (1)	3	14	AM IF Input
FM IF Output (1)	4	13	AM AGC Input
FM IF Input (2)	5	12	+ B2
+ B1	6	11	AM IF Output
FM IF Output (2)	7	10	AM Bypass
FM Bypass	8	9	GND (2)

