



44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748-5089

NTE1049 Integrated Circuit AM Tuner w/RF Amp

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

Supply Voltage, V_{CC}	15V
Supply Current, I_{CC}	40mA
Operating Temperature Range, T_{opt}	-20° to +75°C
Storage Temperature Range, T_{stg}	-40° to +125°C

Recommended Operating Conditions:

Supply Voltage, V_{CC}	10V
Supply Current, I_{CC}	20mA

Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = 10\text{V}$ unless otherwise specified)

Parameter	Symbol	Test Conditions		Min	Typ	Max	Unit
Supply Current	I_{CC}			15	20	25	mA
Voltage Gain	A_v	$f = 1\text{MHz}$, $R_L = 1\text{k}\Omega$, $R_G = 50\Omega$	$R_{B1} = 30\text{k}\Omega$, $V_i = 5\text{mV}$	19	23	26	dB
			$R_{B1} = 3.9\text{k}\Omega$, $V_i = 10\text{mV}$	13	16	20	dB
			$f_i = 455\text{kHz}$, 400Hz , 30% MOD, $R_G = 50\Omega$, $V_O = 400\text{Hz}$, $R_L = 10\text{k}\Omega$	17	20	26	dB
Output Voltage	V_O	$f_i = 455\text{kHz}$, 400Hz , 30% MOD, $R_L = 10\text{k}\Omega$		—	80	—	mV
Total Harmonic Distortion	THD	$f_i = 455\text{kHz}$, 400Hz , 80% MOD, $R_L = 10\text{k}\Omega$, $V_O \div 220\text{mV}$		—	1.5	—	%
AGC Range	AGC			75	85	—	dB

Pin Connection Diagram

Mix Input	1	16	Mixer Bias
Feedback	2	15	Mixer GND
AGC Filter	3	14	Mix Output
RF Output	4	13	GND
(+) B	5	12	RF Input
V _{CC} to AGC Amp	6	11	Amplified AGC
Det Output	7	10	AGC Amp Bias
GND	8	9	FM Input

