

## 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, $T_{opt}$ .....	$-20^\circ$ to $+75^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-40^\circ$ to $+125^\circ\text{C}$

**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, $R_L = 10\text{k}\Omega$ , $V_O \doteq 220\text{mV}$	–	1.5	–	%	
AGC Range	AGC		75	85	–	dB	

### Pin Connection Diagram

