



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

## NTE1242 Integrated Circuit FM/AM IF Amp, AM Converter

**Features:**

- Separate AM and FM Circuitry
- Ceramic Filters Can be Used.
- Same AM and FM Detection Output Level

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

Supply Voltage,  $V_{CC}$  ..... 9.6V  
 Circuit Voltages,  $V_{8-7}, V_{15-6}$  ..... 14.4V  
 Supply Current,  $I_{CC}$  ..... 40mA  
 Power Dissipation ( $T_A = +75^\circ\text{C}$ ),  $P_D$  ..... 400mW  
 Operating Ambient Temperature Range,  $T_{opr}$  .....  $-20^\circ$  to  $+75^\circ\text{C}$   
 Storage Temperature Range,  $T_{stg}$  .....  $-55^\circ$  to  $+150^\circ\text{C}$

**Electrical Characteristics:** ( $V_{CC} = 8V, T_A = +25^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Circuit Current	$I_{tot}$		15	24	34	mA
Detector Output Voltage AM-IF	$V_O$	$V_i = 22\text{dB}\mu\text{V}, f = 1\text{MHz}, f_m = 400\text{Hz}, 30\% \text{MOD}$	2.4	6.0	9.5	mV
FM-IF		$V_i = 33\text{dB}\mu\text{V}, f_m = 400\text{Hz}, f_d = 22.5\text{kHz}, f = 10.7\text{MHz}$	3.8	7.0	10.0	mV
Circuit Voltages	$V_{3-2}$		–	3.0	–	V
	$V_{7-6}$		–	1.7	–	V
	$V_{12-4}$	$V_{10} = 1.0V$	–	–	30	mV
		$V_{10} = 1.4V$	–	66	–	mV
	$V_{4-8}$		–	120	–	mV
	$V_{4-9}$		–	240	–	mV
$V_{15-4}$		–	62	–	mV	

### Pin Connection Diagram

