



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° to +75°C
Storage Temperature Range, T_{stg}	-55° to +150°C

Electrical Characteristics: ($V_{CC} = 8\text{V}$, $T_A = +25^\circ\text{C}$ 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% 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}	$V_{10} = 1.0\text{V}$	-	-	30	mV
		$V_{10} = 1.4\text{V}$	-	66	-	mV
	V_{4-8}		-	120	-	mV
	V_{4-9}		-	240	-	mV
	V_{15-4}		-	62	-	mV

Pin Connection Diagram

