

## NTE1237 Integrated Circuit AM Radio without Audio Stage

**Features:**

- Small External Part Count
- Tuning Meter Circuit
- Wide AGC Range

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

Supply Voltage, $V_{CC}$ .....	18V
Power Dissipation, $P_T$ .....	500mW
Operating Temperature Range, $T_{opr}$ .....	$-20^\circ$ to $+70^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-55^\circ$ to $+125^\circ\text{C}$

**Electrical Characteristics:** ( $V_{CC} = 12\text{V}$ ,  $f = 1\text{MHz}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit	
Maximum Sensitivity	MS	$f_M = 400\text{Hz}$ , MOD = 30%, Output=50mV	37.5	40.0	42.5	dB	
Signal-to-Noise Ratio	S/N	$f_M = 400\text{Hz}$ , MOD = 30%	Input = 40dB/m	8	12	–	dB
			Input = 74dB/m	42	45	–	dB
Total Harmonic Distortion	THD	$f_M = 400\text{Hz}$	MOD = 30%, Input = 74dB/m	–	1.0	2.0	%
			MOD = 80%, Input = 74dB/m	–	1.5	3.0	%
			MOD = 30%, Input = 120dB/m	–	2.5	10	%
Detector Voltage	$V_{O(DET)}$	$f_M = 400\text{Hz}$ , MOD = 30%, Input = 74dB/m	140	170	230	mW	
Tuning Meter Circuit	TM	Input = 74dB/m	50	–	100	%	
Quiescent Current	$I_Q$		–	13	21	mA	

### Pin Connection Diagram

