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## NTE1490 Integrated Circuit FM/AM Radio Receiver System 16-Lead DIP

**Features:**

- Stability is improved by use of the full balance DC feedback type differential IF amplifier
- High sensitivity (Input limiting sensitivity is 32dBμ)
- Large detection output (450mV<sub>rms</sub> typ, 100% mod.)
- Utilizing the external resistance it can be changed freely
- High S/N (77dBμ)
- Wide operation supply voltage

**Absolute Maximum Ratings:** (T<sub>A</sub> = +25°C unless otherwise specified)

Supply Voltage, V<sub>CC</sub> ..... 8V  
 Supply Current, I<sub>CC</sub> ..... 36.4mA  
 Power Dissipation, P<sub>T</sub> ..... 450mW  
 Operating Ambient Temperature Range, T<sub>opr</sub> ..... -20° to +75°C  
 Storage Temperature Range, T<sub>stg</sub> ..... -55° to +125°C

**Electrical Characteristics:** (T<sub>A</sub> = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
<b>FM Characteristics</b>						
Quiescent Current	I <sub>o</sub>		-	24.7	36.4	mA
Recovered AF Voltage	e <sub>o1</sub>	106dBμ, R <sub>L</sub> = 20k	285	450	600	mV <sub>rms</sub>
Total Harmonic Distortion	THD	50μs, de-emphasis	-	0.3	1.0	%
Limiting Sensitivity	V <sub>in(lim)</sub>	-3dB point	-	32	37.5	dBμ
Signal to Noise Ratio	S/N	106dBμ compared with e <sub>O1</sub>	67	77	-	dB
AM Rejection Ratio	AMR	106dBμ AM out as compared with e <sub>O1</sub>	35	50	-	dB
Signal Meter Output	V <sub>M</sub>	106dBμ	1.34	1.60	1.86	V <sub>DC</sub>
<b>AM Characteristics</b>						
Recovered AF Voltage	e <sub>o2</sub>		80	110	160	mV <sub>rms</sub>
Total Harmonic Distortion	THD	74dBμ	-	0.3	2.0	%
Usually Sensitivity	S <sub>IF</sub>	e <sub>o2</sub> = 10mV <sub>rms</sub>	-	31	37	dBμ
Signal to Noise Ratio	S/N <sub>2</sub>	74dBμ compared with e <sub>O2</sub>	-	55	-	dB

FM: f<sub>c</sub> = 10.7MHz, f<sub>m</sub> = 400Hz, ΔF = 75kHz Div

AM: f<sub>c</sub> = 455kHz, f<sub>m</sub> = 400Hz, 30% MOD

### Pin Connection Diagram

