



ELECTRONICS, INC.
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NTE1494 Integrated Circuit AM radio Receiver System

Features:

- Excellent overload characteristics
- Low harmonic distortion
- Buffered output signal for tuning meter
- Delayed AGC for RF amplifier
- Low noise RF amplifier
- Wide supply voltage range: 9 to 14V

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

Supply Voltage, V_{CC} 14V
 Power Dissipation, P_T^* 550mW
 Operating Ambient Temperature Range, T_{opr} $-20 \sim +60^\circ\text{C}$
 Storage Temperature Range, T_{stg} $-55 \sim +125^\circ\text{C}$

Electrical Characteristics: ($V_{CC} = 13\text{V}$, $T_A = 25^\circ\text{C}$, unless otherwise specified)

Symbol	Test Conditions	Min	Typ	Max	Unit
V_{12}		–	12	–	V
V_1		–	11	–	
V_3		–	11	–	
V_4		–	11	–	
V_2		–	2.8	–	
V_5		–	5	–	
V_6		–	9.4	–	
V_7		–	2	–	
V_8		–	0.92	–	
V_9		–	0.01	–	
V_{10}		–	3.8	–	
V_{11}		–	4.4	–	
V_{13}		–	2.8	–	
V_{15}		–	2.8	–	
V_{14}		–	2.85	–	

Symbol	Test Conditions	Min	Typ	Max	Unit
I_1		–	4	5.5	mA
I_3		–	0.5	0.7	
I_4		–	10	17	
I_{12}		–	8	13.5	
I_o		–	22.5	36.7	

Electrical Characteristics–2: ($V_{CC} = 13V$, $f_o = 1MHz$, $f_m = 400Hz$, 30% mod., $T_A = 25^\circ C$)

Symbol	Test Conditions		Min	Typ	Max	Unit
T.H.D.	ANT. Input = 74dB μ	See Test Circuit	–	0.3	1.1	%
	ANT. Input = 104dB μ		–	0.3	1.1	
V_n	ANT. Input = 34dB μ		–	4	6.2	mV _{rms}
	ANT. Input=74dB μ		–	0.55	1.1	
I_9	ANT. Input=0dB μ		–	10	15	μA
Q.S	(S+N)/N=30dB		–	32	–	dB μ
(S+N)/N	ANT. Input = 60dB μ		–	54	–	dB
	ANT. Input=74dB μ		–	54	–	
V_{in} max	T.H.D. = 1%		–	109	–	dB μ
I_9 max	ANT. Input=110dB μ		–	165	–	μA
Tweet Rej.	ANT. Input = 60dB μ		–	32	–	dB

Pin Connection Diagram

