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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:** ( $V_{CC} = 13V$ ,  $T_A = 25^\circ\text{C}$ , 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 $\mu$	-	0.3	1.1	%
	ANT. Input = 104dB $\mu$	-	0.3	1.1	
$V_n$	ANT. Input = 34dB $\mu$	-	4	6.2	mV <sub>rms</sub>
	ANT. Input = 74dB $\mu$	-	0.55	1.1	
$I_g$	ANT. Input = 0dB $\mu$	-	10	15	$\mu A$
Q.S	(S+N)/N = 30dB	-	32	-	dB $\mu$
(S+N)/N	ANT. Input = 60dB $\mu$	-	54	-	dB
	ANT. Input = 74dB $\mu$	-	54	-	
$V_{in\ max}$	T.H.D. = 1%	-	109	-	dB $\mu$
$I_g\ max$	ANT. Input = 110dB $\mu$	-	165	-	$\mu A$
Tweet Rej.	ANT. Input = 60dB $\mu$	-	32	-	dB

**Pin Connection Diagram**

