



ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089
<http://www.nteinc.com>

NTE1096 Integrated Circuit TV AFT, High Frequency Wide-Band Amplifier/Phase Detector

Description:

The NTE1096 is an IC for use in TV circuits, especially for Automatic Frequency Tuning. It contains a wide-band amplifier and phase detector.

Features:

- V_{CC} of 100V \pm 10% due to Dual Zener Regulation

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

Current Supply, I_{14}	60mA
Power Dissipation, P_D	700mW
Thermal Dissipation, K_θ	7mW/ $^\circ\text{C}$
Operating Temperature Range, T_{opr}	-20° to $+85^\circ\text{C}$
Storage Temperature Range, T_{stg}	-40° to $+125^\circ\text{C}$

Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Power Dissipation	P_d	$V_{CC} = 100\text{V}$, $R_S = 5.1\text{k}\Omega$, Note 1	150	200	250	mW
Loud Current	I_{CC}	$V_{14} = 9\text{V}$, $V_{CC} = 9\text{V}$	4.3	6.3	9.5	mA
Voltage or Current at Specified Pin	V_{14}	$V_{CC} = 100\text{V}$, $R_S = 5.1\text{k}\Omega$, Note 1	11.1	11.8	12.5	V
	I_4		1.0	2.1	4.3	mA
	V_7		5.0	6.5	8.0	V
	V_{7-8}		-1.5	0	1.5	V
Signal In to Limiter	$V_{i(lim)}$	$f = 58.75\text{MHz}$	-	100	-	mV

Note 1. R_S is a $5.1\text{k}\Omega \pm 5\%$, 2W resistor in series with Pin14 and V_{CC}

Pin Connection Diagram

