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## NTE1471 Integrated Circuit Color TV Deflection Signal Processor

**Functions:**

- Sync separator
- Horizontal AFC
- Horizontal Oscillator
- X-ray radiation protector
- Vertical oscillator
- Vertical blanking pulse generator

**Features:**

- On-chip blanking circuit: Simplifies output circuit design
- Constant discharge current: No vertical output linearity adjustment
- Horizontal oscillator frequency limiter: No X-ray protector malfunction
- Hold-type operation for X-ray protector
- Less reduction of impedance from frost between pins

**Absolute Maximum Ratings:**

Vertical Supply Voltage, $V_{CC(V)}$ .....	16V
Horizontal Supply Current, $I_{CC(H)}$ .....	25mA
Vertical Output Current, $I_{OV}$ .....	15mA
Horizontal Output Current, $I_{OH}$ .....	15mA
Power Dissipation ( $T_A = +75^\circ\text{C}$ ), $P_T$ .....	500mW
Operating Temperature Range, $T_{opr}$ .....	$-20^\circ$ to $+75^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-55^\circ$ to $+125^\circ\text{C}$

**Electrical Characteristics:**

Parameter	Symbol	Min	Typ	Max	Unit
Horizontal DC Loop Gain	$f_c$	–	750	–	Hz/ $\mu\text{s}$
Horizontal Osc Frequency	$f_{OH}$	14.734	15.734	16.734	kHz
Horizontal Pull-In Range	$f_{pH}$	450	650	–	Hz
Trigger Gate Voltage	$V_{GT}$	0.65	0.72	0.79	V
Vertical Osc Frequency	$f_{OV}$	50	55	60	Hz
Vertical Blanking Pulse Delay Time (Note 1)	$t_{BLK}$	–10	40	180	$\mu\text{s}$
Quiescent Sync Input Horizontal Frequency (Note 2)	$f_{OH(L)}$	14.5	14.9	–	kHz

Note 1. Delay from vertical output blanking threshold  
 Note 2. Minimum frequency under quiescent sync signal input

### Pin Connection Diagram

