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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° to $+75^\circ\text{C}$
Storage Temperature Range, T_{stg}	-55° to $+125^\circ\text{C}$

Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Unit
Horizontal DC Loop Gain	f_c	–	750	–	Hz/ μs
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	μs
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

