

## NTE1312 Integrated Circuit Vertical OSC, Amp

**Description:**

The NTE1312 is a silicon monolithic integrated circuit in a 14-Lead DIP type package designed for use in TV vertical oscillator, sync circuits. It includes a vertical oscillator, vertical trigger and comparator amplifier.

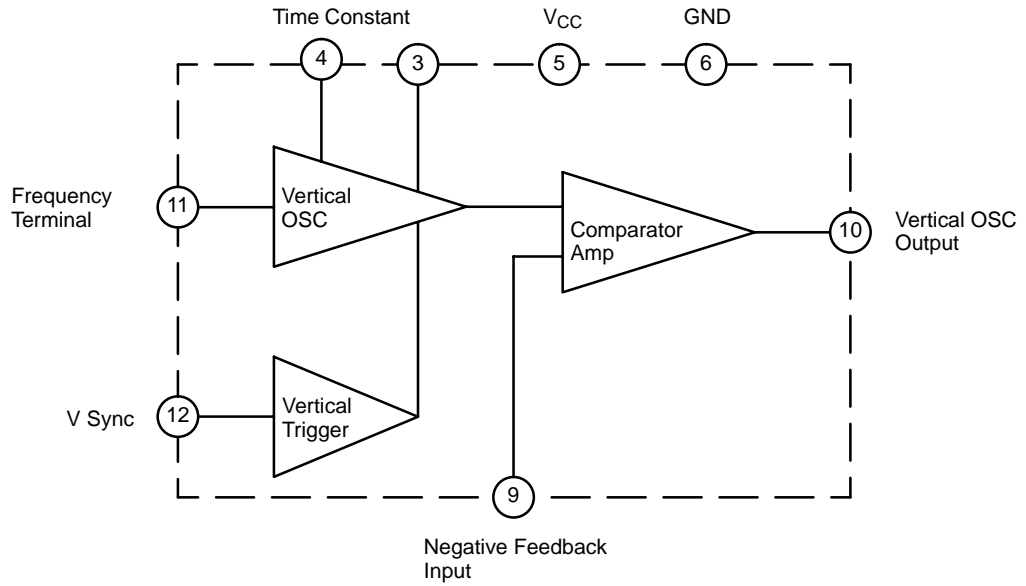
**Absolute Maximum Ratings:** ( $T_A = +25^\circ\text{C}$  unless otherwise specified)

Supply Voltage,  $V_{CC}$  ..... 20V  
 Vertical Sync Input Voltage,  $V_{(\text{Sync})}$  .....  $3V_{p-p}$   
 Operating Temperature,  $T_{\text{stg}}$  .....  $-50^\circ\text{C}$  to  $+125^\circ\text{C}$   
 Power Dissipation,  $P_D$  ..... 0.58W

**Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$ ,  $V_{CC} = 12\text{V}$  unless otherwise specified)

Characteristics	Symbol	Conditions	Min	Typ	Max	Unit
Circuit Current	$I_D$		9.25	12.5	15.25	mA
Vertical Free Run Frequency	$f_1$		56.0	58.5	61.0	Hz
Vertical Free Run Frequency (Upper Limit)	$f_2$		70.0	74.0	78.5	Hz
Vertical Free Run Frequency (Lower Limit)	$f_3$		46.5	49.0	51.5	Hz
Vertical Pull-in-Frequency	$f_4$		–	49.0	51.5	Hz
Vertical Output Amplitude	$V_{O1}$		2.95	3.05	3.20	$V_{p-p}$
Vertical Output Bias	$V_{O2}$		2.90	3.00	3.15	V
Supply Voltage Characteristics (V-Oscillator)	$\Delta f_1$	Difference Between Frequency of $V_{CC} = 8\text{V}$ & $16\text{V}$		0.7	1.5	Hz

### Block Diagram



### Pin Connection Diagram

