

NTE1208 Integrated Circuit CMOS, Phase Comparator

Description:

The NTE1208 is an integrated circuit in a 9-Lead SIP type package consisting of a digital phase comparator and an amplifier. Three state output connected to low pass filter (using an internal amplifier) will produce DC voltage to control a VCO.

Low state pulses appear on phase out as long as the loop is unlocked and these can be utilized as lock indicator.

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

Supply Voltage, V_{DD} 10V
Input Voltage, V_{IN} -0.3V to $V_{DD}+0.3\text{V}$
Operating Temperature Range, T_{opr} -30° to $+75^\circ\text{C}$
Storage Temperature Range, T_{stg} -55° to $+125^\circ\text{C}$

Electrical Characteristics: ($T_A = -35^\circ$ to $+75^\circ\text{C}$, $V_{DD} = 7.5\text{V}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Operating Supply Voltage	V_{DD}		4.5	—	8.0	V
Output Voltage, "H" Level	V_{OH}	$V_{IL} = 1.6\text{V}$, $V_{IH} = 6.6\text{V}$, $I_{OH} = -50\mu\text{A}$	7.3	—	—	V
Output Voltage, "L" Level	V_{OL}		—	—	0.2	V
Quiescent Current	I_{DD}	$V_{IH} = 7.5\text{V}$, $V_{IL} = 0\text{V}$	—	—	200	μA
3 State Leakage Current	I_{TLH}		—	—	500	nA
	I_{TLL}		—	—	-500	nA
Filter Amp Voltage Gain	A_V	$R_{1-2} = 1\text{M}\Omega$, $f_{IN} = 1\text{kHz}$, $R_g = 600\Omega$	—	3.0	—	dB

Pin Connection Diagram
(Front View)

