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# NTE1197
# Integrated Circuit
# OSC and 12–Stage Divider

**Description:**

The NTE1197 is an integrated circuit in a 9–Lead SIP type package consisting of a 12 stage frequency divider and an amplifier for use in crystal oscillator applications. This device is designed to operate with an input frequency of 10.24MHz. Available reference dividing ratios are $2^8$, $2^{10}$, $2^{11}$ and $2^{12}$.

**Absolute Maximum Ratings:** ($T_A$ = +25°C unless otherwise specified)

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

**Electrical Characteristics:** ($T_A$ = –30° to 75°C unless otherwise specified)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Operating Supply Voltage | $V_{DD}$ | X' tal = 10.24MHz | 4.5 | – | 8.0 | V |
| Operating Current | $I_{DD}$ | X'tal = 10.24MHz $V_{DD}$= 7.5V | – | – | 7.0 | mA |
| Output Voltage High Level | $V_{OH}$ | $V_{DD}$ = 7.5V, $I_{OL}$ = 50μA, Pin4, Pin6, Pin7, Pin8 | 7.3 | – | – | V |
| Output Voltage Low Level | $V_{OL}$ | $V_{DD}$ = 7.5V, $I_{OH}$ = –50μA, Pin4, Pin6, Pin7, Pin8 | – | – | 0.2 | V |
| Maximum Clock Frequency | $f_{MAX}$ | $V_{DD}$ = 7.5V | 10.24 | – | – | MHz |
| PIN Output Voltage | $V_{OUT}$ | $V_{DD}$ = 7.5V, $C_L$ = 15pF, X'tal = 10.24MHz | 3.5 | – | – | $V_{P–P}$ |

**Pin Connection Diagram**
(Front View)