

## NTE1198 Integrated Circuit CMOS Frequency Divider

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

Supply Voltage, $V_{CC}$ .....	-0.3V to +6.0V
Input Voltage, $V_i$ .....	-0.3V to +6.0V
Output Voltage, $V_O$ .....	-0.3V to +6.0V
Output Current, $I_O$ .....	$\pm 10\text{mA}$
Operating Temperature Range, $T_{opr}$ .....	$-30^\circ$ to $+75^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-55^\circ$ to $+125^\circ\text{C}$

**Electrical Characteristics:** ( $T_A = -30^\circ$  to  $+60^\circ\text{C}$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
High Level Input Voltage	$V_{IH}$	Total Input, $V_{DD} = 5\text{V}$	3.5	–	–	V
Low Level Input Voltage	$V_{IL}$	Total Input, $V_{DD} = 5\text{V}$	–	–	1.0	V
High Level Output Voltage	$V_{OH}$	Total Input, $V_{DD} = 5\text{V}$	4.6	–	–	V
Low Level Output Voltage	$V_{OL}$	Total Input, $V_{DD} = 5\text{V}$	–	–	0.4	V
Low Level Output Current	$I_{OL}$	IS, $V_{DD} = 4.5\text{V}$ , $V_O = 2\text{V}$	0.1	–	–	mA
		CO, DSH, $V_{DD} = 4.5\text{V}$ , $V_O = 0.5\text{V}$	0.5	–	–	mA
High Level Output Current	$I_{OH}$	IS, $V_{DD} = 4.5\text{V}$ , $V_O = 2.5\text{V}$	–	–	-0.1	mA
		CO, DSH, $V_{DD} = 4.5\text{V}$ , $V_O = 4.0\text{V}$	–	–	-0.5	mA
Input Current	$I_I$	$T_A = +25^\circ\text{C}$ , $V_{DD} = 5.5\text{V}$ , $V_{I(AI)} = 2.5\text{V}$	–	1.0	–	mA
Supply Current	$I_{DD}$	$f = 0$ , $V_{DD} = 5.5\text{V}$	–	10	–	$\mu\text{A}$
Maximum Operating Frequency	$f_{max}$	PD, $V_{DD} = 4.5\text{V}$	3	–	–	MHz
		PD, $T_A = -30^\circ$ to $+75^\circ\text{C}$	2	–	–	MHz
		DIVIDER, $V_{DD} = 4.5\text{V}$ , $V_{IL} = 0.5\text{V}$ , $V_{IH} = 4\text{V}$	11	–	–	MHz
		$\emptyset/D$ , $V_{DD} = 4.5\text{V}$	3	–	–	MHz

### Pin Connection Diagram

