

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

