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NTE754 Integrated Circuit Single Toggle Flip-Flop

Features:

- Wide Operating Voltage Range –6V to 16 V
- Regulated Supply Not Required
- Economical 4-Lead Plastic Package

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

Power Supply Voltage, V_{CC}	19V
Output Sinking Current	10mA
Negative Input Voltage, V_{IN}	0.5V
Power Dissipation (Package Limitation), P_D	1.0W
Derate above $T_A = +25^\circ\text{C}$	10mW/ $^\circ\text{C}$
Operating Temperature Range, T_J	–10 to $+75^\circ\text{C}$

Electrical Characteristics: ($V_{CC} = 12\text{V}$, $V_{in} = 4V_{(p-p)}$ Square Pulse, $f = 10\text{kHz}$, 50% Duty Cycle, $t_{PHL} = 1\text{V}/\mu\text{s}$, $T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Test Conditions	Min	Typ	Max	Unit
Operating Power Supply Voltage		6	–	16	V
Toggle Frequency		–	3	–	MHz
Output Voltage, High	$V_{CC} = 6\text{V}$	5.5	–	–	V
	$V_{CC} = 16\text{V}$	15.5	–	–	V
Output Voltage, Low	$V_{CC} = 6\text{V}$	–	–	0.3	V
	$V_{CC} = 16\text{V}$	–	–	0.5	V
Operating Drain Current	$V_{CC} = 16\text{V}$	–	–	32	mA
Output Sinking Current	$V_O \leq 1.0\text{V}$	–	2	–	mA
Rise Time		–	250	–	ns
Storage Time		–	350	–	ns
Fall Time		–	60	–	ns
Input Resistance		10	–	–	k Ω
Output Resistance, Output High		–	–	2.8	k Ω
Input Pulse Requirements					
Pulse Magnitude		+4.0	–	–	V
Zero Level		–	–	+1.0	V
Leading Edge		No Requirement			
Trailing Edge, dv/dt		–1.0	–	–	V/ms

Pin Connection Diagram

