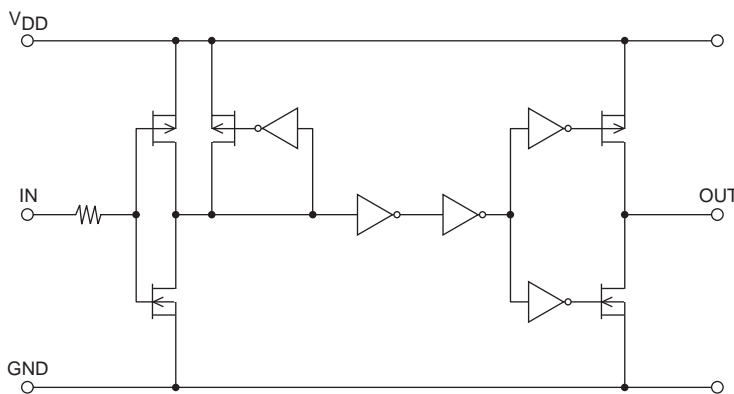
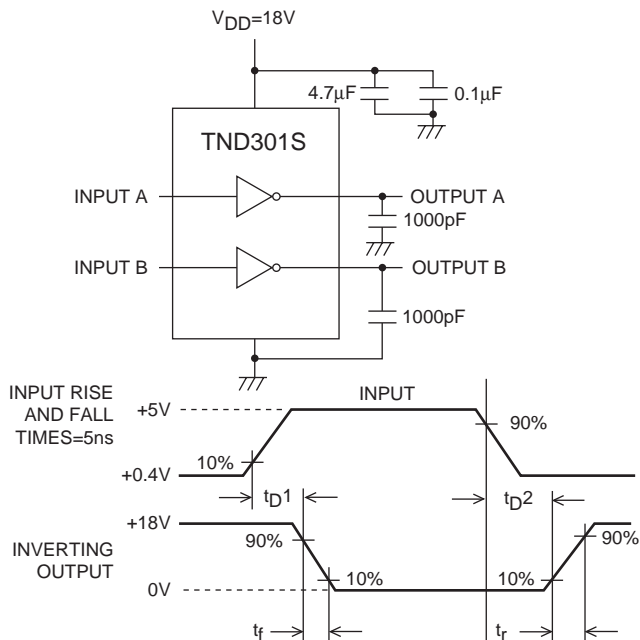
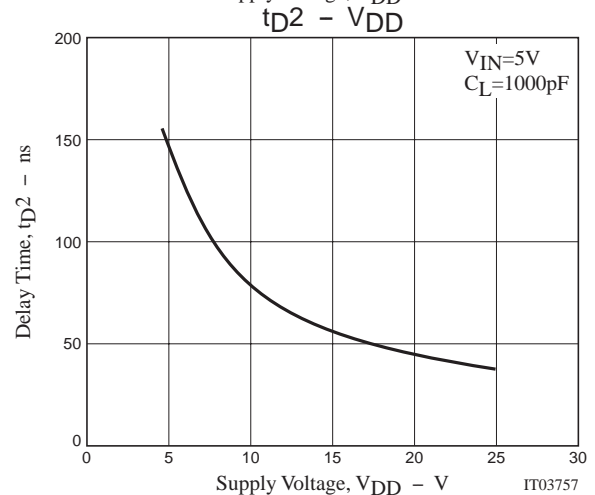
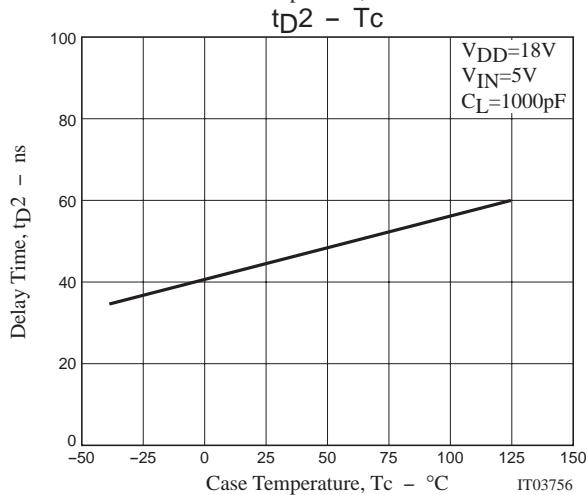
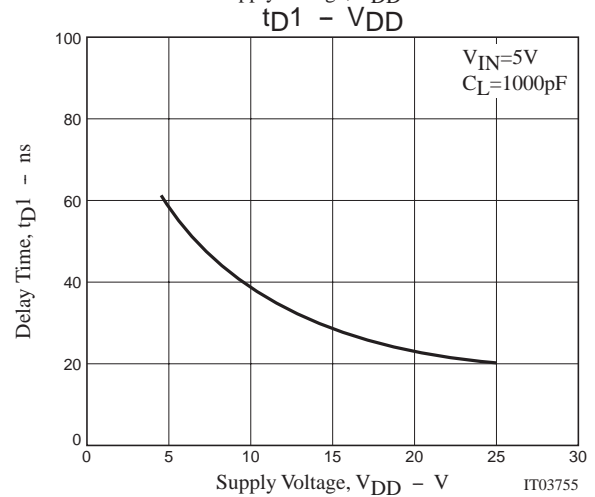
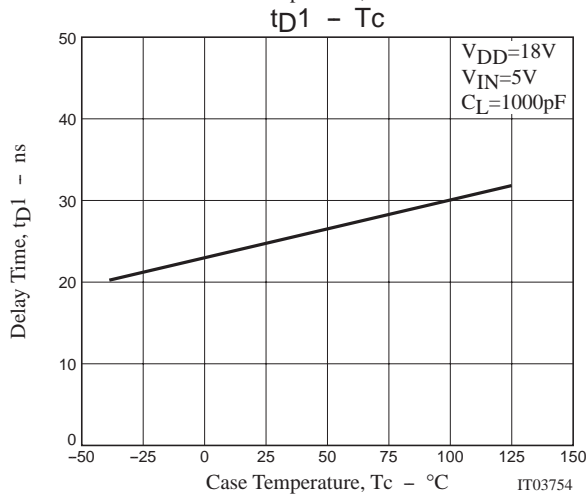
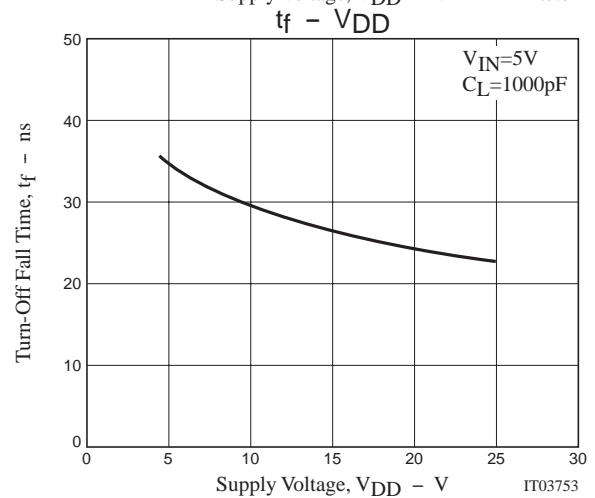
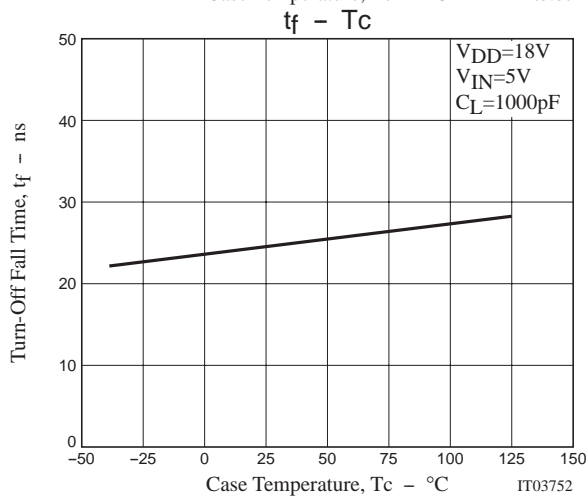
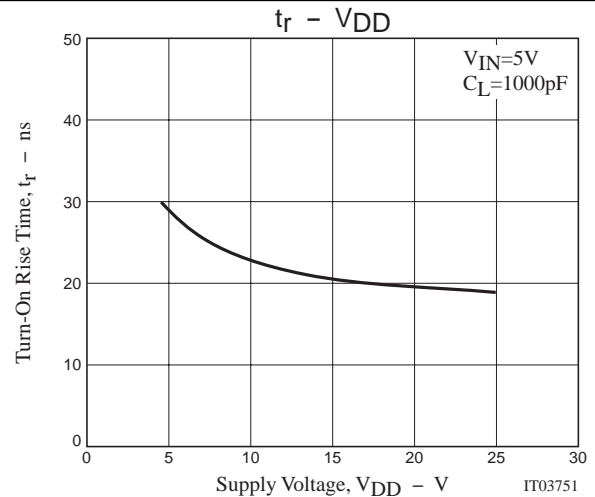
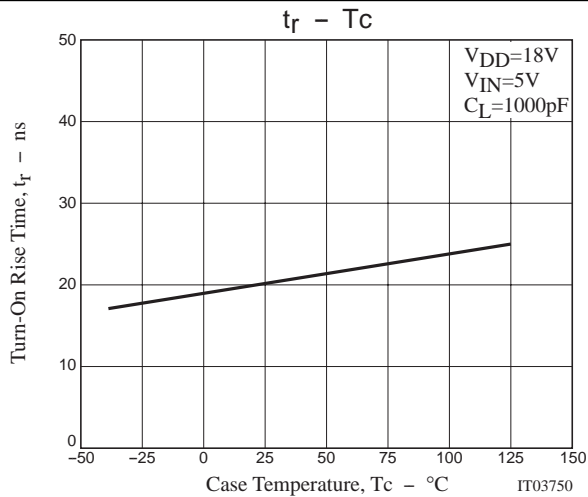


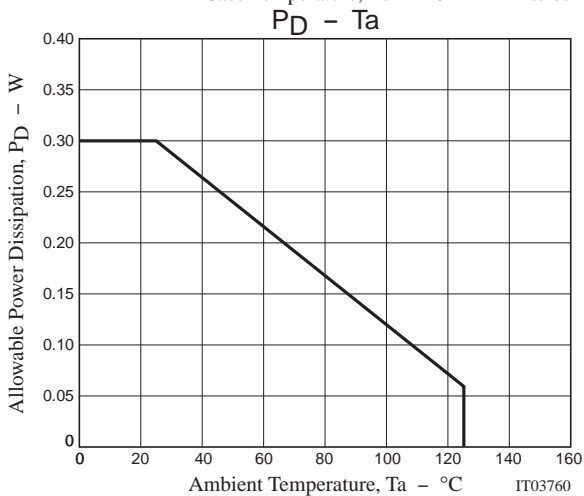
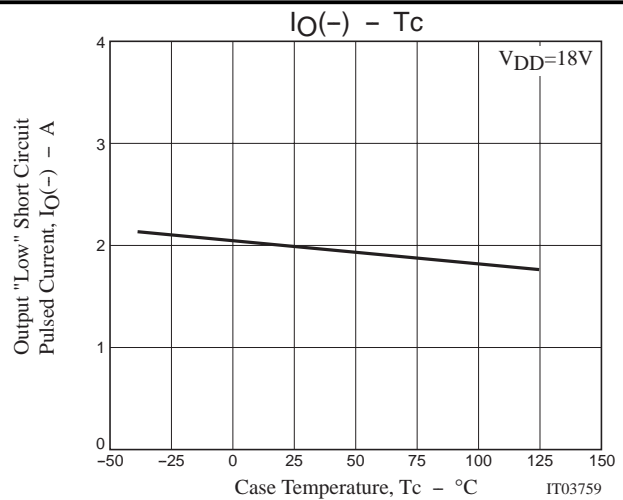
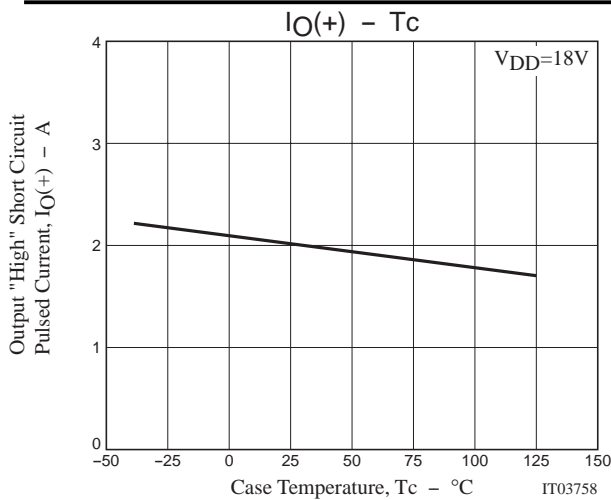
## TND301S

**Electrical Characteristics** (DC Characteristics) at  $T_a=25^\circ\text{C}$ ,  $V_{DD}=4.5$  to  $25\text{V}$ 

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Logic "1" Input Voltage	$V_{IH}$		2.6			V
Logic "0" Input Voltage	$V_{IL}$				0.8	V
Input Bias Current	$I_{IN}$	$V_{IN}=0$ or $V_{DD}$	-1		1	$\mu\text{A}$
High Level Output Voltage	$V_{OH}$	$I_O=0$	$V_{DD}-0.1$			V
Low Level Output Voltage	$V_{OL}$	$I_O=0$			0.1	V
$V_{DD}$ Supply Current	$I_{supp}$	$V_{DD}=10\text{V}$ , $V_{IN}=3\text{V}$ , (both inputs)		1.0	4.5	mA
		$V_{DD}=10\text{V}$ , $V_{IN}=0$ , (both inputs)			0.2	mA
Output High Short Circuit Pulsed Current	$I_{O+}$	$V_{DD}=18\text{V}$ , $PW \leq 10\mu\text{s}$ , $V_{OUT}=0$		2.0		A
Output Low Short Circuit Pulsed Current	$I_{O-}$	$V_{DD}=18\text{V}$ , $PW \leq 10\mu\text{s}$ , $V_{OUT}=18\text{V}$		2.0		A
Output On Resistance	$R_{OUT}$	$V_{DD}=18\text{V}$ , $I_{load}=10\text{mA}$ , $V_{OUT}=\text{"H"}$		4	6	$\Omega$
		$V_{DD}=18\text{V}$ , $I_{load}=10\text{mA}$ , $V_{OUT}=\text{"L"}$		3	5	$\Omega$

**Block Diagram****Switching Time Measuring Circuit**





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