

TND322VD

Recommend Operating Conditions at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Operating Supply Voltage	V _{DD}		4.5 to 25	V
Operating Temperature	Topr		-40 to +125	°C

Functional operation above the stresses listed in the Recommended Operating Ranges is not implied. Extended exposure to stresses beyond the Recommended Operating Ranges limits may affect device reliability.

Electrical Characteristics (AC Characteristics) at Ta=25°C, V_{DD}=18V, V_{IN}=5V

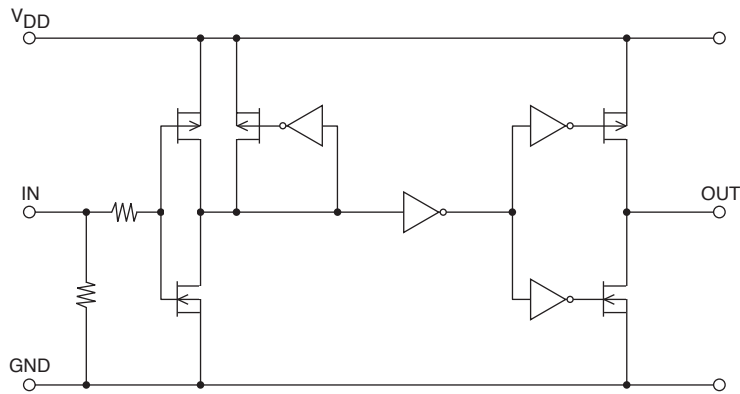
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Turn-On Rise Time	t _r	CL=1000pF		35	50	ns
Turn-Off Fall Time	t _f	CL=1000pF		30	45	ns
Delay Time	t _{D1}	CL=1000pF		30	45	ns
	t _{D2}	CL=1000pF		45	60	ns

Electrical Characteristics (DC Characteristics) at Ta=25°C, V_{DD}=4.5 to 25V

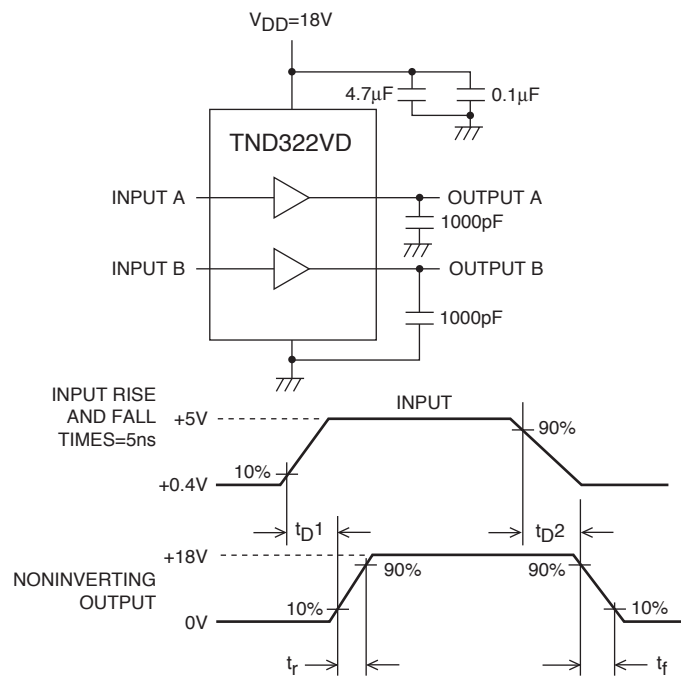
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Logic "1" Input Voltage	V _{IH}		2.6			V
Logic "0" Input Voltage	V _{IL}				0.8	V
Logic "1" Input Bias Current	I _{IN+}	V _{IN} =V _{DD} =25V		40	100	μA
Logic "0" Input Bias Current	I _{IN-}	V _{IN} =0V	-1		1	μA
High-level Output Voltage	V _{OH}	I _O =0A	V _{DD} -0.1			V
Low-level Output Voltage	V _{OL}	I _O =0A			0.1	V
V _{DD} Supply Current	I _{supp}	V _{DD} =10V, V _{IN} =3V, (both inputs)		1.0	4.5	mA
		V _{DD} =10V, V _{IN} =0V, (both inputs)			0.2	mA
Output High Short Circuit Pulsed Current	I _{O+}	V _{DD} =18V, PW≤10μs, V _{OUT} =0V		0.8		A
Output Low Short Circuit Pulsed Current	I _{O-}	V _{DD} =18V, PW≤10μs, V _{OUT} =18V		1.0		A
Output On Resistance	R _{OUT}	V _{DD} =18V, I _{load} =10mA, V _{OUT} ="H"		11	16.5	Ω
		V _{DD} =18V, I _{load} =10mA, V _{OUT} ="L"		6	10	Ω

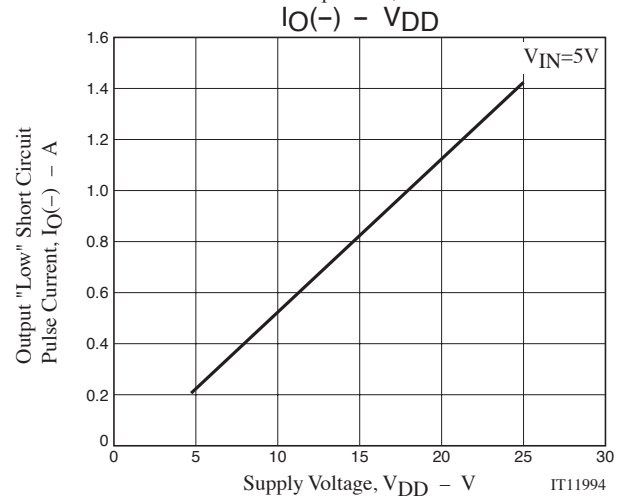
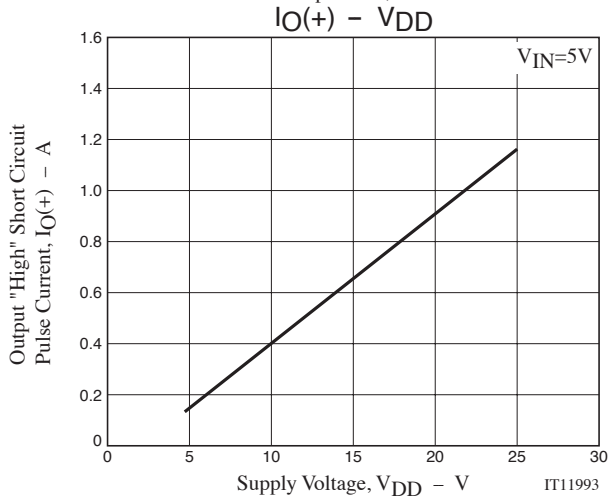
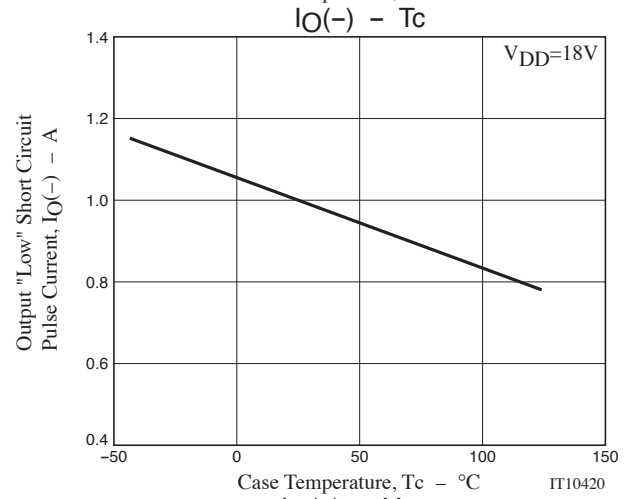
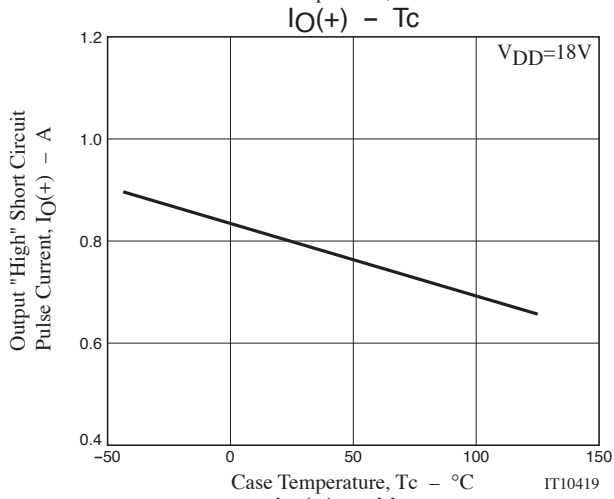
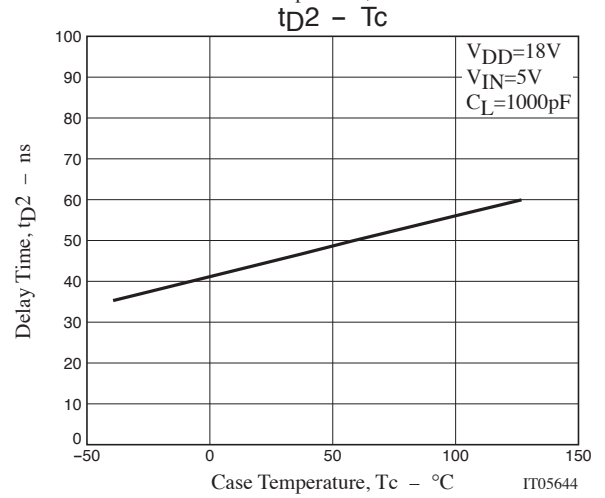
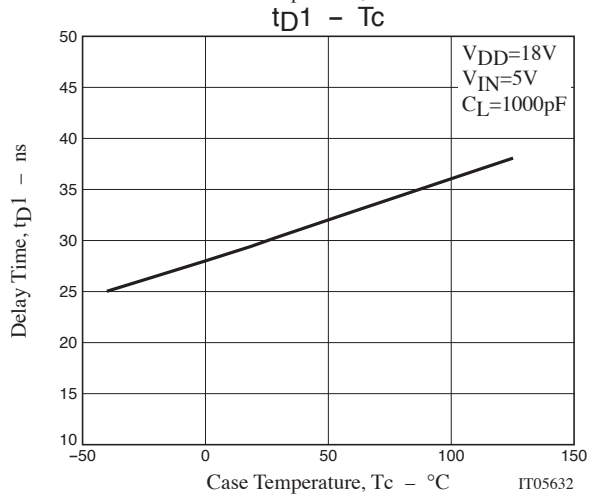
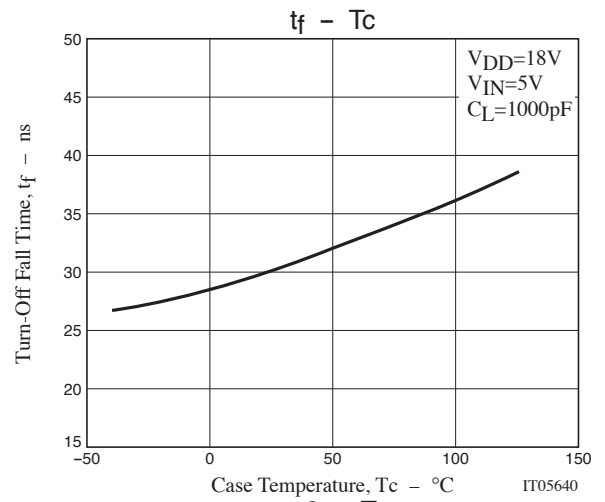
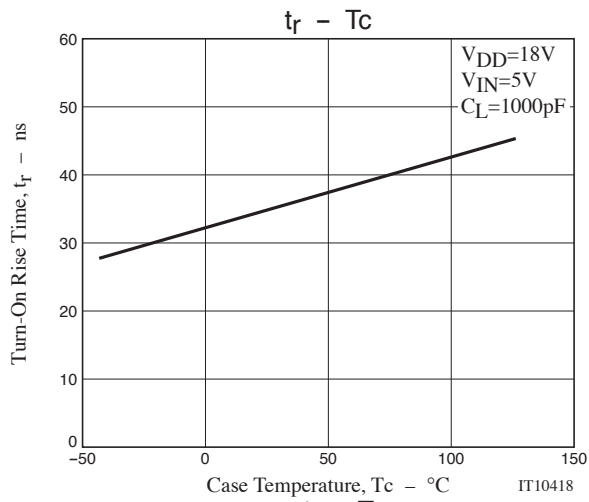
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

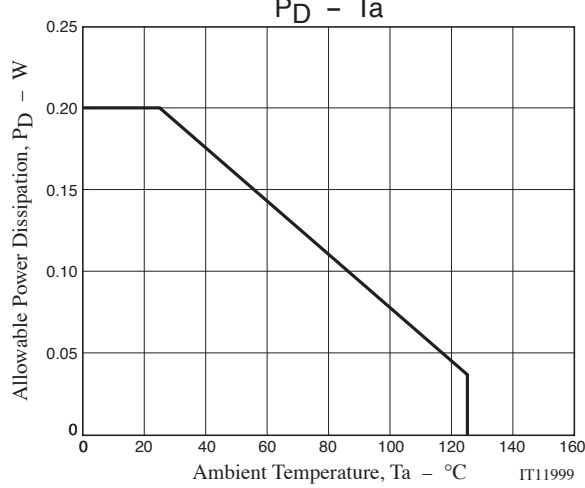
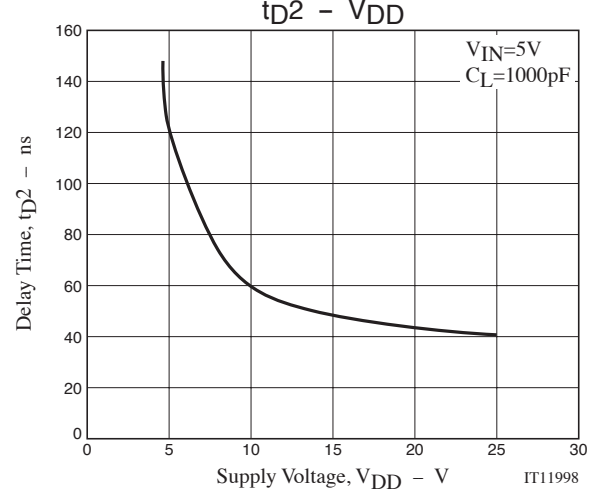
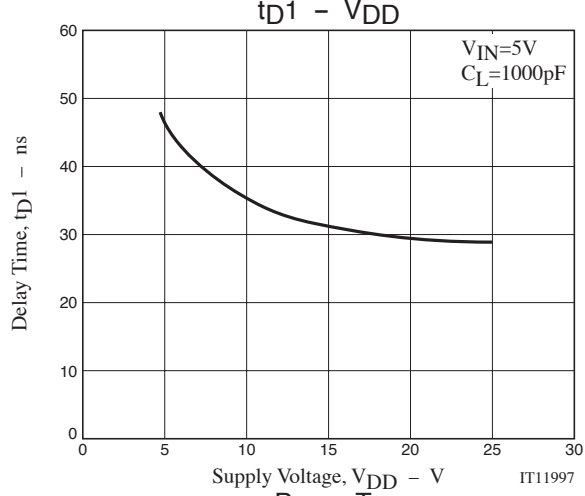
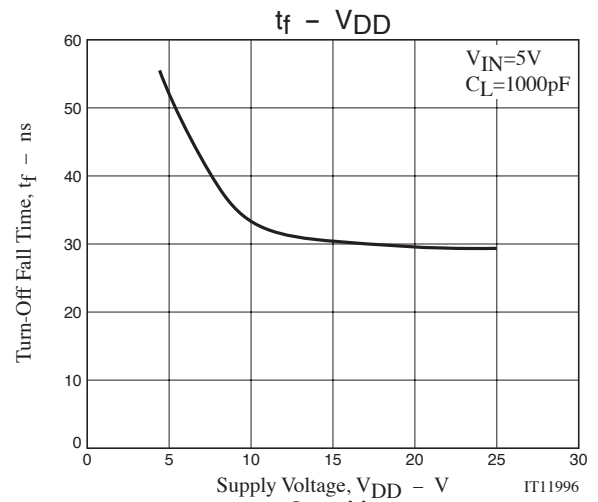
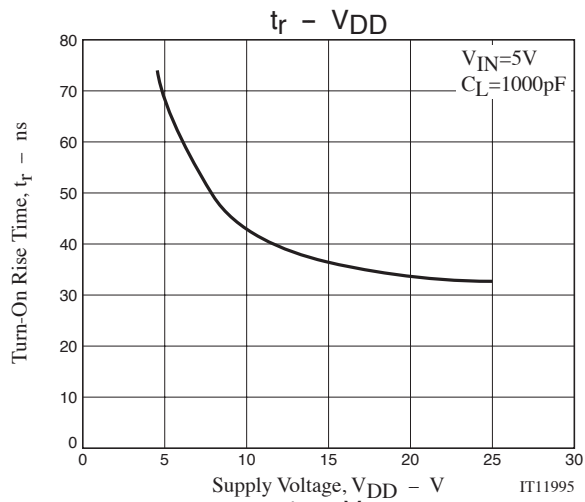
Block Diagram



Switching Time Test Circuit







Package Dimensions

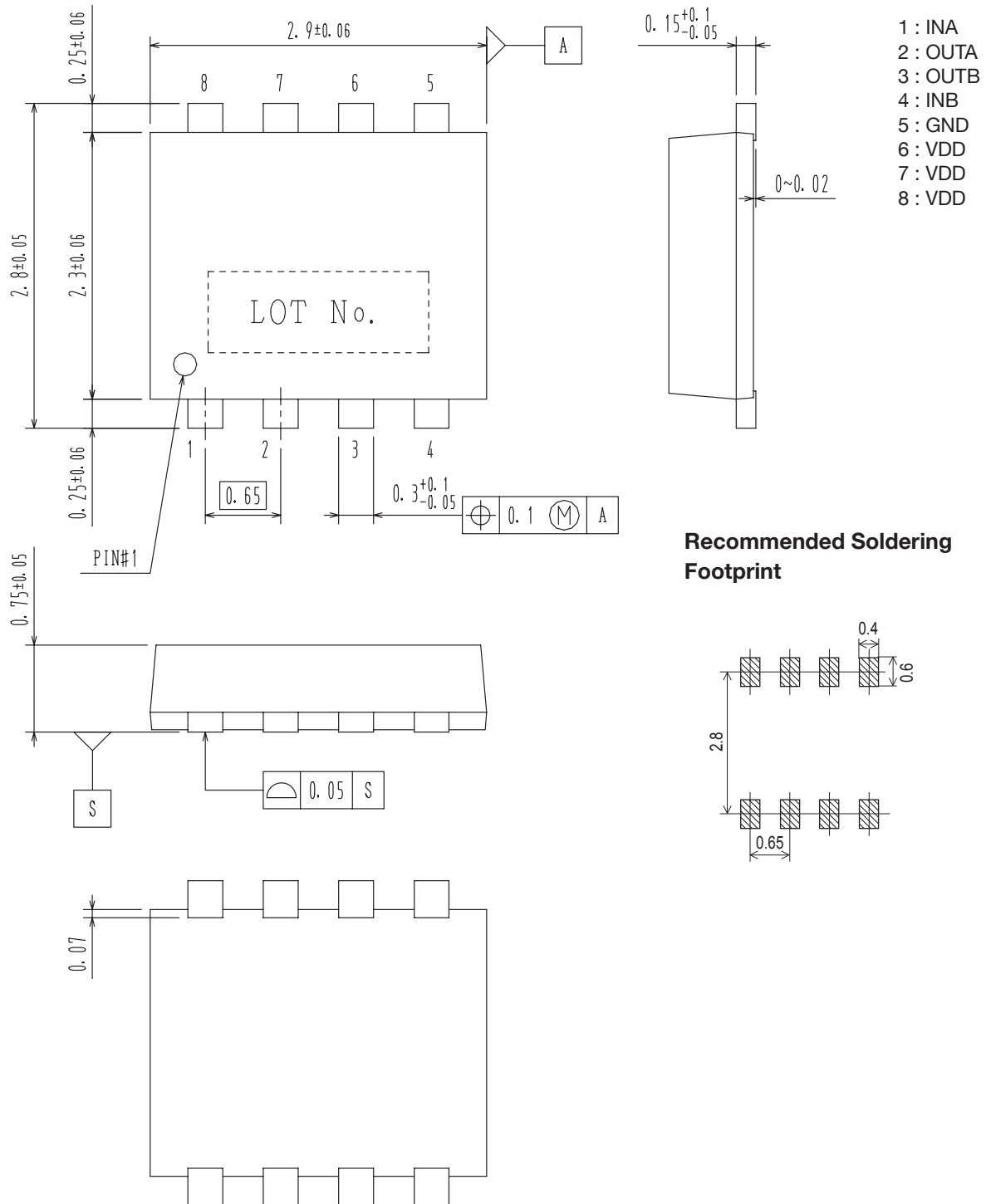
unit : mm

TND322VD-TL-E, TND322VD-TL-H

SOT-28FL / VEC8

CASE 318AH

ISSUE O



ORDERING INFORMATION

Device	Package	Shipping	memo
TND322VD-TL-E	SOT-28FL / VEC8	3,000pcs. / Tape and Reel	Pb-Free
TND322VD-TL-H	SOT-28FL / VEC8	3,000pcs. / Tape and Reel	Pb-Free and Halogen Free

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