阅读申明

1.本站收集的数据手册和产品资料都来自互联网，版权归原作者所有。如读者和版权方有任何异议请及时告之，我们将妥善解决。
2.本站提供的中文数据手册是英文数据手册的中文翻译，其目的是协助用户阅读，该译文无法自动跟随原稿更新，同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
3.本站提供的产品资料，来自厂商的技术支持或者使用者的心得体会等，其内容可能存在描叙上的差异，建议读者做出适当判断。
4.如需与我们联系，请发邮件到marketing@iczoom.com，主题请标有“数据手册”字样。

Read Statement

1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.

2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader’ s learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.

3. All product information provided on the website refer to solutions from manufacturers’ technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.

4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with “Datasheets”.

Downloaded from www.iczoom.com

Ordering number : ENN7083A

ExPD (Excellent Power Device)

TND301S

General Purpose Driver for PDP Sustain Pulse Drive, DC / AC Motor Drive, Switching Power Supply, and DC / DC Converter Applications

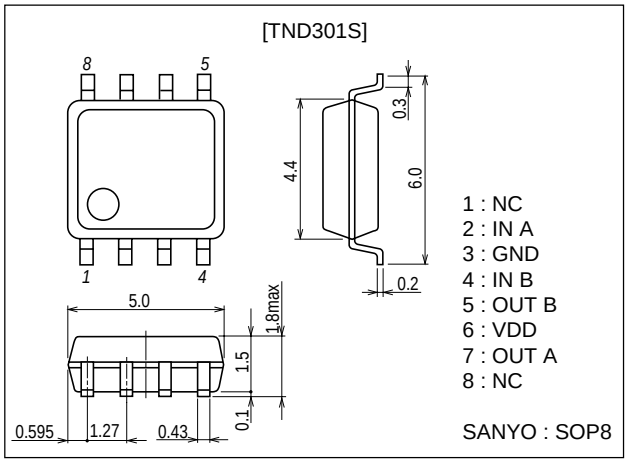
Features

- Dual inverter.
- Monolithic structure(High voltage CMOS process adopted).
- Withstand voltage of 25V is assured.
- Wide range of operating voltage : 4.5V to 25V.
- Peak outpout current : 2A.
- Fast switching time(25ns typical at 1000pF load).
- Fully compatible input to TTL/CMOS. (V_{IH}=not more than 2.6V, at V_{DD}=4.5 to 25V)

Package Dimensions

unit : mm

2199



Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Supply Voltage	V_{DD}		0 to 25	V
Input Voltage	V_{IN}		GND–0.3 to V_{DD}+0.3	V
Allowable Power Dissipation	P_D max		0.3	W
Junction Temperature	Tj		–55 to +150	°C
Storage Temperature	Tstg		–55 to +150	°C

Recommended 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

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	C_L=1000pF		20	35	ns
Turn-Off Fall Time	t_f	C_L=1000pF		25	40	ns
Delay Time	$t_{D}1$	C_L=1000pF		25	40	ns
	$t_{D}2$	C_L=1000pF		45	60	ns

■ Any and all SANYO products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's control systems, or other applications whose failure can be reasonably expected to result in serious physical and/or material damage. Consult with your SANYO representative nearest you before using any SANYO products described or contained herein in such applications.

■ SANYO assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all SANYO products described or contained herein.

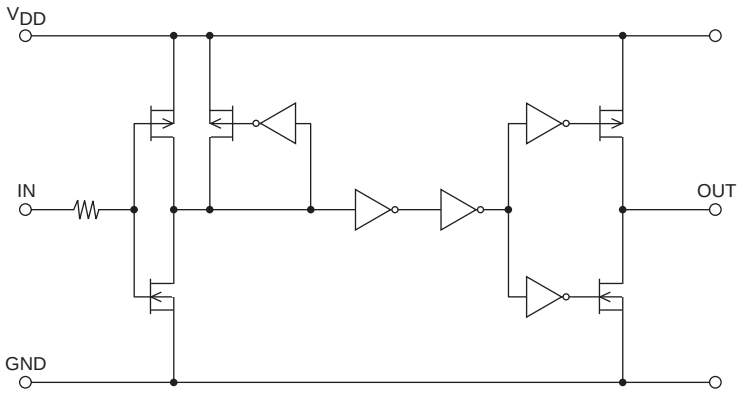
SANYO Electric Co.,Ltd. Semiconductor Company

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

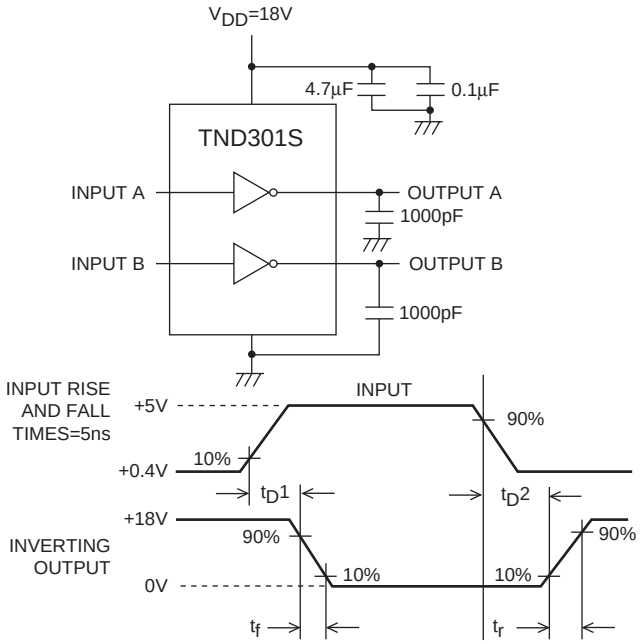
Electrical Characteristics (DC Characteristics) at Ta=25°C, V_{DD}=4.5 to 25V

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
Input Bias Current	I_{IN}	V_{IN}=0 or V_{DD}	–1		1	μA
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	Isupp	V_{DD}=10V, V_{IN}=3V, (both inputs)		1.0	4.5	mA
		V_{DD}=10V, V_{IN}=0, (both inputs)			0.2	mA
Output High Short Circuit Pulsed Current	I_O+	V_{DD}=18V, PW≤10μs, V_{OUT}=0		2.0		A
Output Low Short Circuit Pulsed Current	I_O-	V_{DD}=18V, PW≤10μs, V_{OUT}=18V		2.0		A
Output On Resistance	R_{OUT}	V_{DD}=18V, Iload=10mA, V_{OUT}=“H”		4	6	Ω
		V_{DD}=18V, Iload=10mA, V_{OUT}=“L”		3	5	Ω

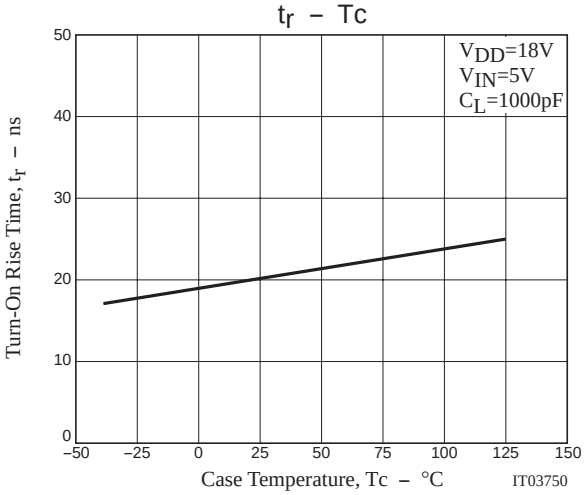
Block Diagram



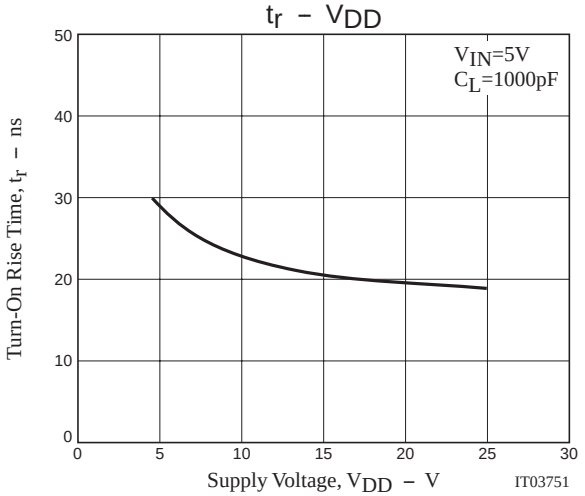
Switching Time Measuring Circuit



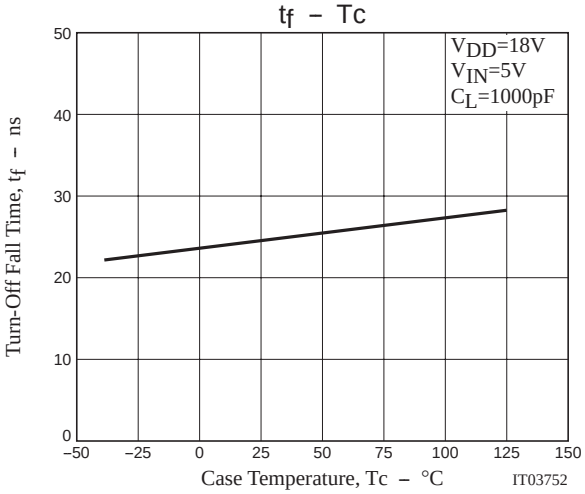
t_r – Tc



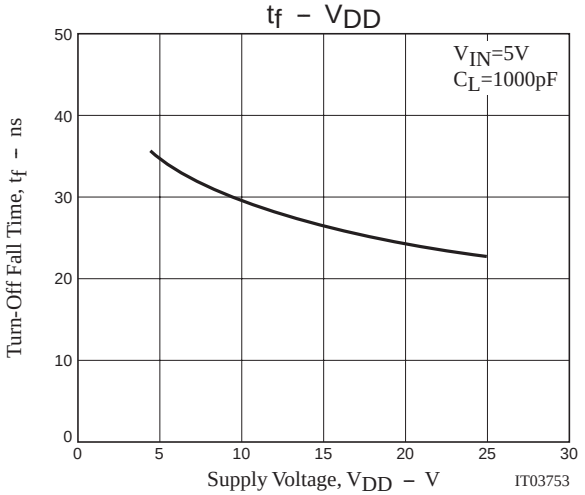
t_r – V_{DD}



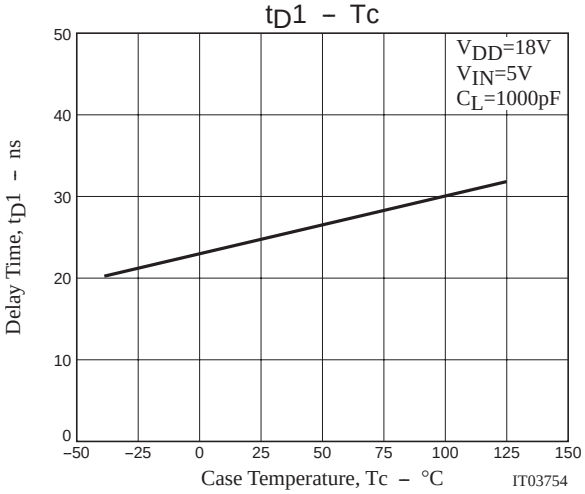
t_f – Tc



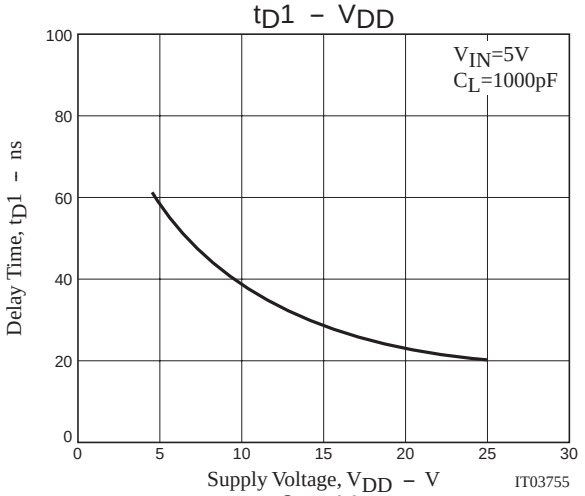
t_f – V_{DD}



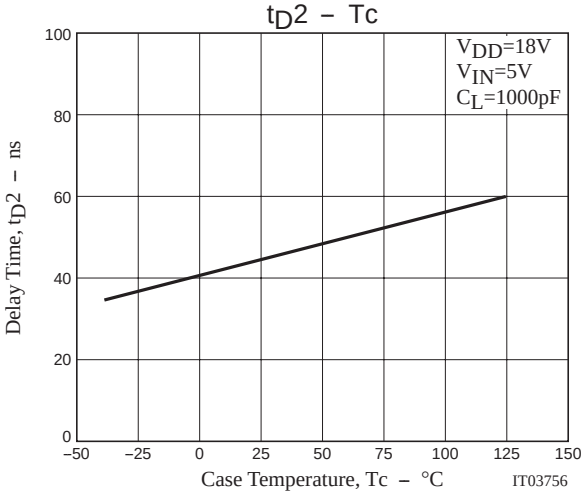
$t_{D}1$ – Tc



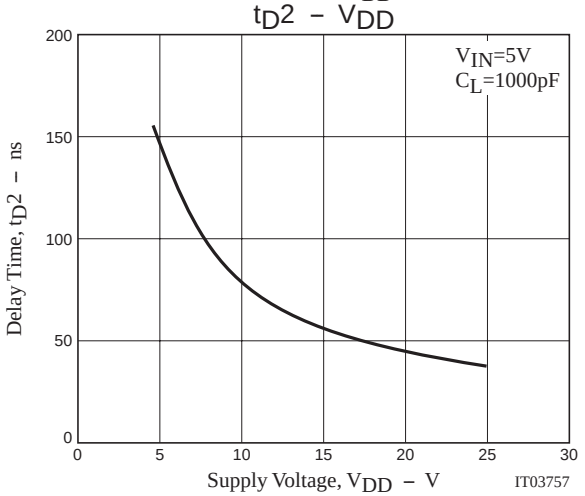
$t_{D}1$ – V_{DD}

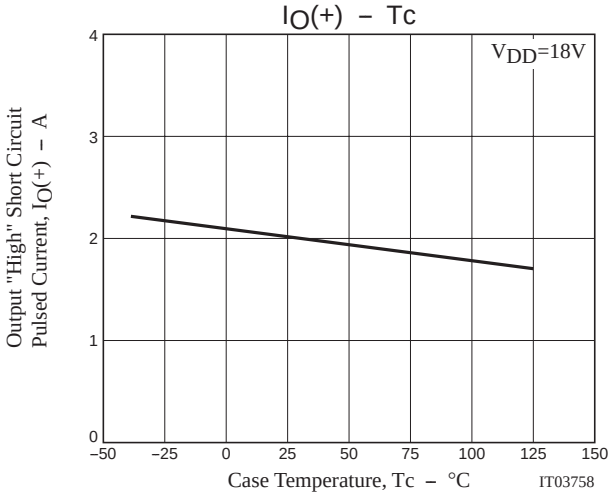


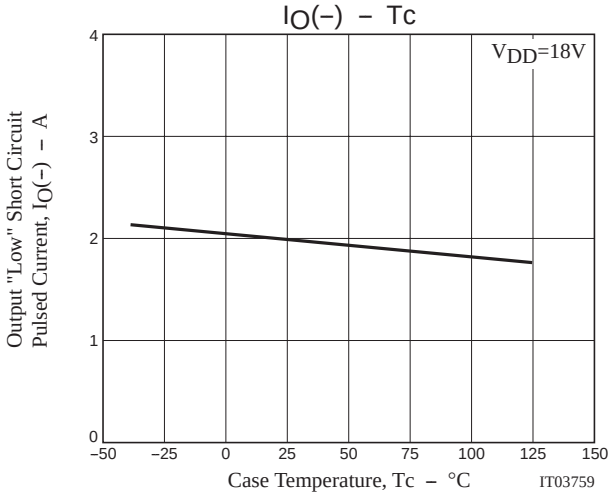
$t_{D}2$ – Tc

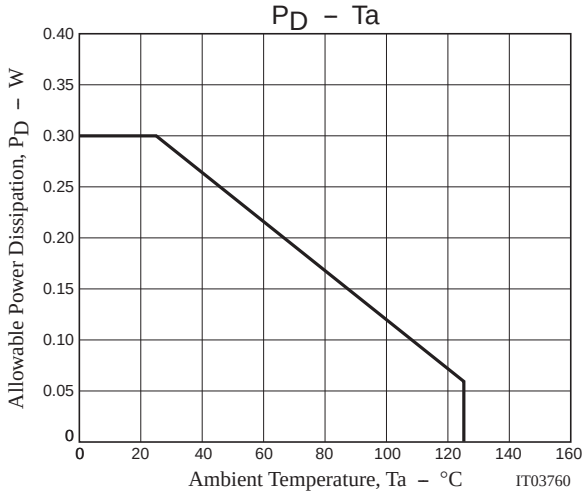


$t_{D}2$ – V_{DD}









- Specifications of any and all SANYO products described or contained herein stipulate the performance, characteristics, and functions of the described products in the independent state, and are not guarantees of the performance, characteristics, and functions of the described products as mounted in the customer's products or equipment. To verify symptoms and states that cannot be evaluated in an independent device, the customer should always evaluate and test devices mounted in the customer's products or equipment.
- SANYO Electric Co., Ltd. strives to supply high-quality high-reliability products. However, any and all semiconductor products fail with some probability. It is possible that these probabilistic failures could give rise to accidents or events that could endanger human lives, that could give rise to smoke or fire, or that could cause damage to other property. When designing equipment, adopt safety measures so that these kinds of accidents or events cannot occur. Such measures include but are not limited to protective circuits and error prevention circuits for safe design, redundant design, and structural design.
- In the event that any or all SANYO products(including technical data,services) described or contained herein are controlled under any of applicable local export control laws and regulations, such products must not be exported without obtaining the export license from the authorities concerned in accordance with the above law.
- No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or any information storage or retrieval system, or otherwise, without the prior written permission of SANYO Electric Co., Ltd.
- Any and all information described or contained herein are subject to change without notice due to product/technology improvement, etc. When designing equipment, refer to the "Delivery Specification" for the SANYO product that you intend to use.
- Information (including circuit diagrams and circuit parameters) herein is for example only ; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.

This catalog provides information as of June, 2003. Specifications and information herein are subject to change without notice.