

300 kHz Repetition Rate NanoSpeed™ Switch Driver

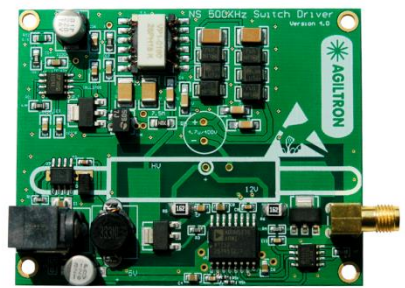
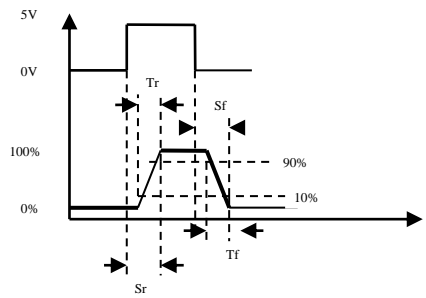
(Protected by U.S. patent 7,403,677B1 and pending patents)

Product Description

The NS switch driver provides a convenient way to use the NS series electro-optical switches, which act as a pure capacitive load. Each driver is tuned to a specific device mounted on the PCB. To operate, the customer only needs to plug in the accompanying DC power supply and input a control signal through the golden SMA connector. The switch will be activated as the input voltage exceeds 3V with less than 1µA draw, compatible with 3.3V CMOS/TTL. We produce boards to control multiple NS switches with individual SMA connectors. No computer-based control software is available for such a high-speed operation.

Features

- High speed
- High repetition
- High output voltage
- Wide input voltage range
- TTL/CMOS control
- Push-Pull output design
- Low power consumption
- Compact and low cost



Performance Specifications

Specs	Min	Typical	Max	Unit
Rise Time (Tr) ^[1]		85	100	ns
Fall Time (Tf) ^[2]		85	100	ns
Switch Speed (Rise) (Sr) ^[3]		315	350	ns
Switch Speed (Fall) (Sf) ^[4]		315	350	ns
Repetition Rate	DC		300	kHz
Pulse Width	1.0			us
Control Input (TTL pulse)	0		5	V
Power Consumption			12	W
Power Current	0.08		1.0	A
Power Supply		12		V
Operating Temperature	-5		70	°C
Storage Temperature	-40		80	°C
Electrical Connector	SMA			
Board Size	3(L)x2.5(W)x1.5(H)			Inch

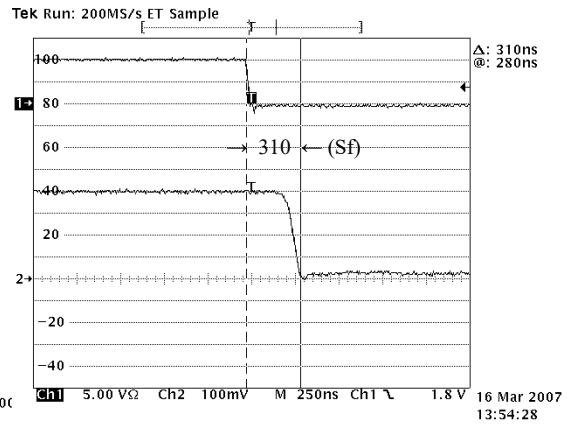
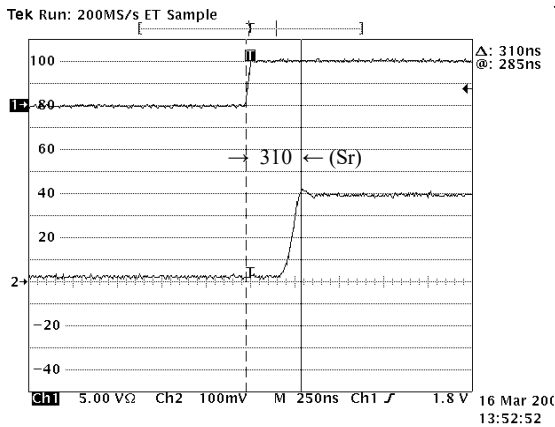
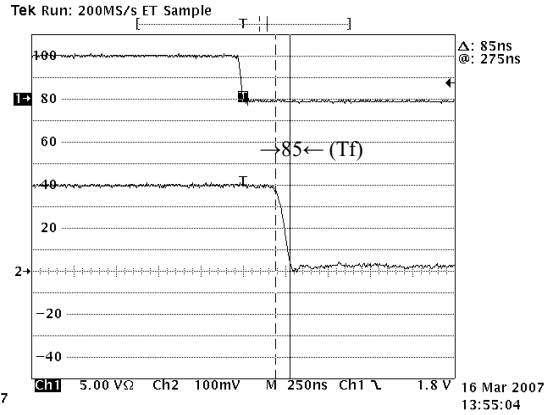
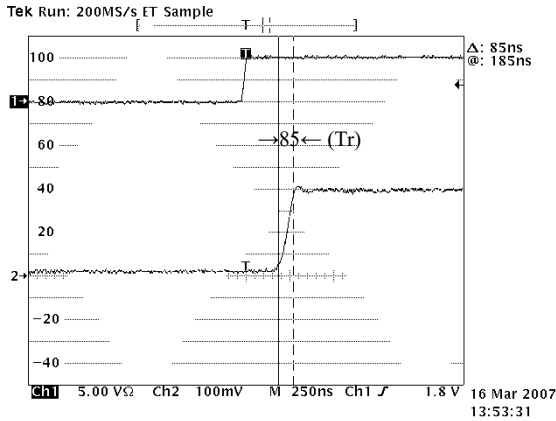
Note:
 [1]: Optic Intensity Change from 10% to 90% intuit;
 [2]: Optic Intensity Change from 90% to 10% intuit;
 [3]: Switch Speed (Rise): Duration from begin of electronic signal to end of optic intensity change;
 [4]: Switch Speed (Fall): Duration from begin of electronic signal to end of optic intensity change.

Applications

- Optical Switch
- EO device driver

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Response Measurement



Ordering Information

SWDR-	1	<input type="checkbox"/> <input type="checkbox"/>	2	8	1	1	1	1
	Switch Type	Function	Latching or not	Repeat rate	Footprint	# of Switch	Control Mode	DC supply
	NS Switch =1	1x1 = 1a 1x2 = 2a 2x1 = 2b 2x2 = 22 1x4 = 4a 4x1 = 4b 1x12 = 12 1xM = M (M >9) Special=00	Non-latching =2	300kHz = 8	Standard = 1	1 switch=1	TTL=1	12VDC =1 Special =0

[1]: 5V DC supply may not be available for certain switch. Please have a consultant with sale's manager.

*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

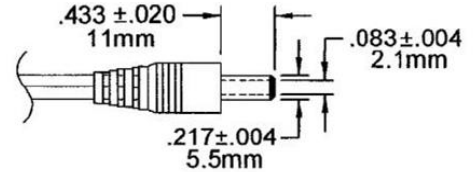
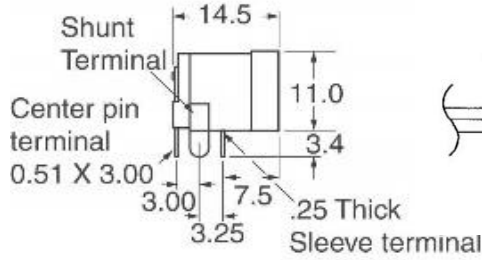
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Power Connector

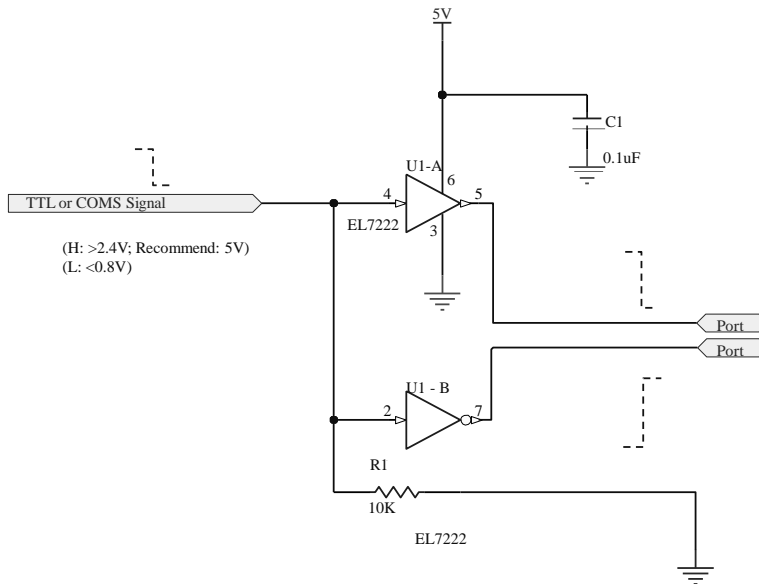
P/N: SC1313-ND

Power Barrel Connector Jack 2.00mm ID (0.079"),
5.50mm OD (0.217") Through Hole, Right Angle

12V Wall Plug DC Power Supply Interface



TTL Driver Interface (Our Circuit Diagram)



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