

100 kHz Repetition Rate NanoSpeedTM 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 $1\mu A$ 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.



Performance Specifications

Specs	Min	Typical	Max	Unit	
Rise Time (Tr) ^[1]		85	100	ns	
Fall Time (Tf) ^[2]		85	100	ns	
Repetition Rate	DC		100	kHz	
Pulse Width	1.0			μS	
Control Input (TTL pulse)	0		5	V	
Power Consumption			5	W	
Power Current	0.08		0.4	Α	
Power Supply		12		V	
Operating Temperature	-5		70	° C	
Storage Temperature	-40		80	°C	
Electrical Connector	SMA				
Board Size	3.5(L)x1.25(W) Inc				

Note:

- [1]: Optic Intensity Change from 10% to 90% intuits;
- [2]: Optic Intensity Change from 90% to 10% intuits;
- [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.

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

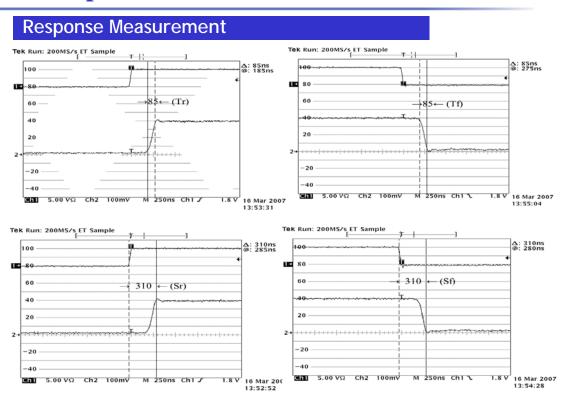
Applications

- Optical Switch
- EO device driver

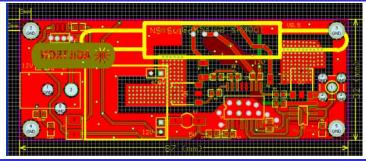
Revision: 12-02-2020 15 Presidential Way, Woburn, MA 01801 Tel: (781) 935-1200 Fax: (781) 935-2040



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Dimensions (mm)



Ordering Information

Swit								
	itch Type	Function	Latching or not	Repeat rate [1]	Footprint	# of Switch	Control Mode	DC supply
NS Sw	sw 1x-	vitches = 1a (4, 4x1 switches	Non-latching =2			2 switches=2 3 switches=3 N switches=N Special=0	USB =2	12VDC =1 5VDC ^[2] =2 Special =0

[2]: 5V DC supply may not be available for certain switch. Please have a consultant with sale's manager.

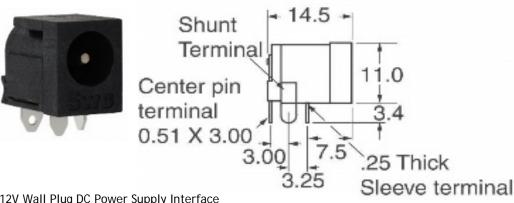


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Power Connector

P/N: <u>SC1313-N</u>D

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

