# 100 kHz Repetition Rate NanoSpeed™ Switch Driver

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

Product Description

The NS high repetition switch driver provides driving signals for the NS series solid state switches. The push-pull output design ensures fast switching time for both rising and falling edges, and it is especially suitable for driving capacitive switch loads.

The standard driver controls one individual switch. Drivers that control multiple switches also are available, please call Sales at (781) 935-1200.
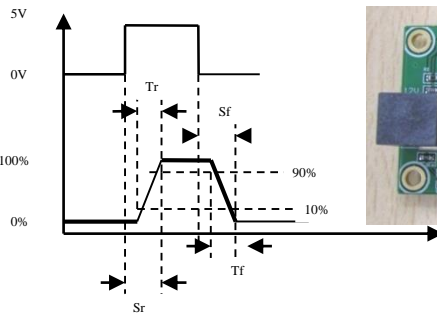
Features

- 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

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		100	kHz
Pulse Width	1.0			us
Control Input (TTL pulse)	0		5	V
Power Consumption			5	W
Power Current	0.08		0.4	A
Power Supply		12		V
Operating Temperature	-5		70	º C
Storage Temperature	-40		80	º C
Electrical Connector	SMA			
Board Size	3.5(L)x1.25(W)			Inch

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;
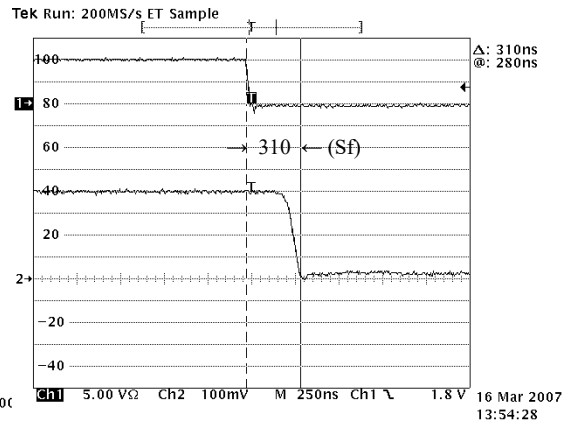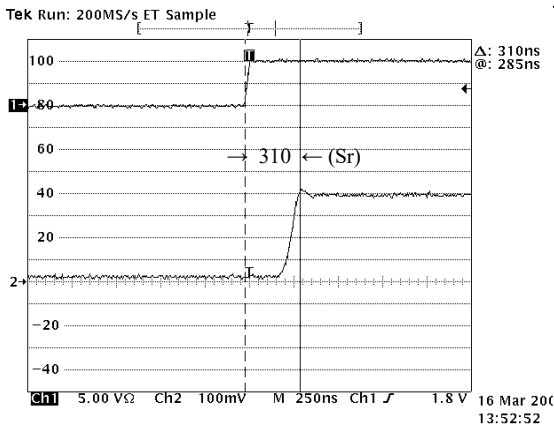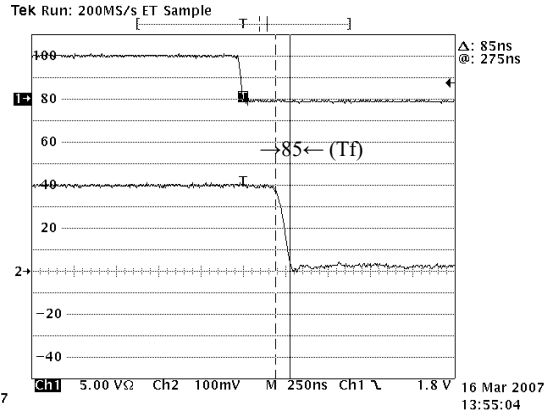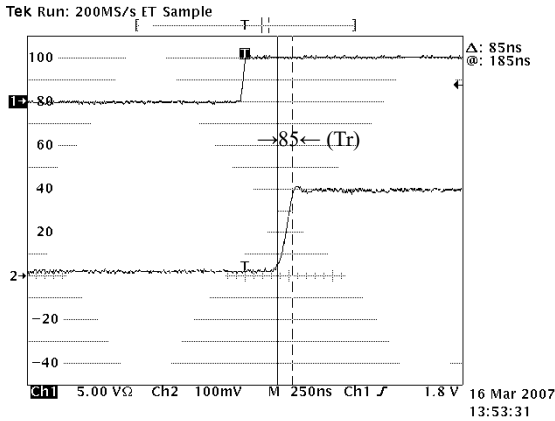[4]: Switch Speed (Fall): Duration from begin of electronic signal to end of optic intensity change.

100 kHz Repetition Rate
NanoSpeed™ Switch Driver

Response Measurement

Ordering Information

SWDR-	1			2	6	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	5kHz = 5 100kHz = 6 500kHz = 9 Special = 0	Standard = 1 Special = 0	1 switch=1 2 switches=2 3 switches=3 N switches=N Special=0	TTL=1 USB =2 RS232 =3 TTL & USB = 4 RS232 & USB = 5 Special=0	12VDC =1 5VDC[1] =2 Special =0

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

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