

DC-5KHz Driver for NanoSpeed™ Switch

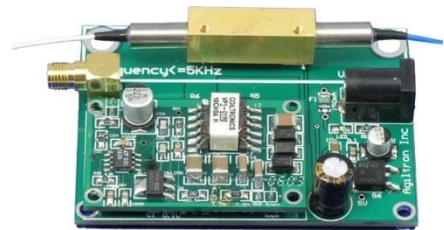
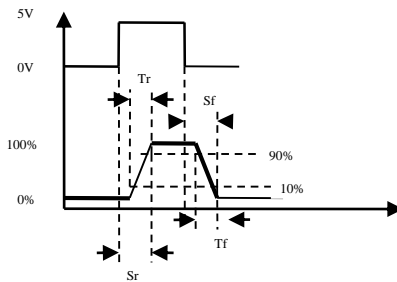
(patent pending)

Product Description

The NS 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 loads. The standard driver controls one individual switch. Drivers that control multiple switches also are available. It has a built-in protector (LED flash) against higher repetition rate over 5MHz and can be reset by restarting the power.

Features

- High speed
- 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] | | 200 | 250 | ns |
| Switch Speed (Fall) (Sf) ^[3] | | 200 | 250 | ns |
| Repetition Rate ^[4] | DC | | 5 | kHz |
| Pulse Width | 1.0 | | | us |
| Control Input | 0 | | 5 | V |
| Power Consumption | 0.6 | | 3 | W |
| Power Supply | | 12 | | V |
| Operating Temperature | -5 | | 70 | °C |
| Storage Temperature | -40 | | 80 | °C |
| Electrical Connector | SMA | | | |
| Board Size | 2.8(W)x2.0(D)x1(H) | | | Inch |

Note:

[1]: Optic Intensity Change from 10% to 90% intuit;

[2]: Optic Intensity Change from 90% to 10% intuit;

[3]: Including electronic signal delay;

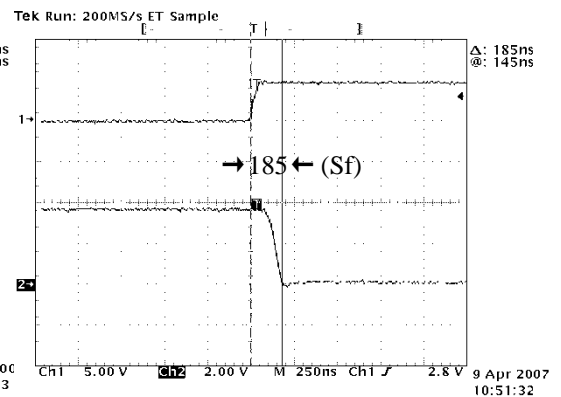
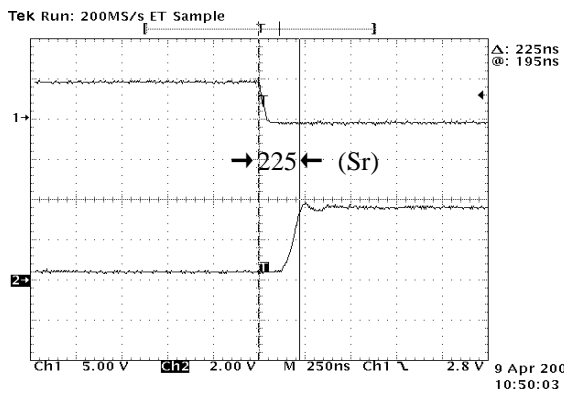
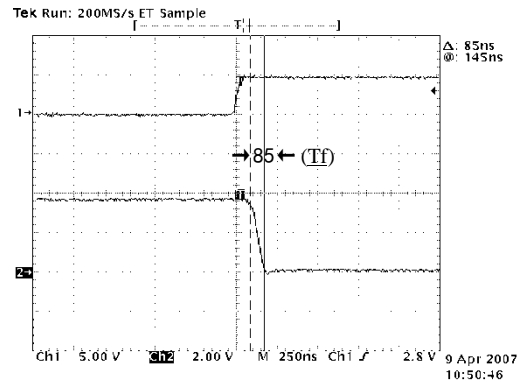
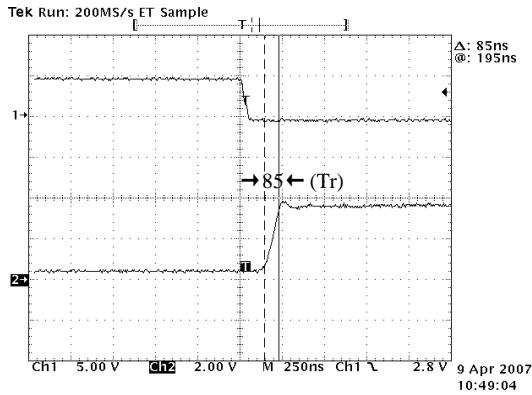
[4]: When the repetition rate is > 5kHz, an alarm LED will be flashing. Restart DC power to release this protection.

Applications

- Optical Switch
- EO device driver
- Piezoelectric driver
- Pockel Cell driver

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Response Measurement



Ordering Information

| SWDR- | 1 | <input type="checkbox"/> <input type="checkbox"/> | 2 | 5 | 1 | <input type="checkbox"/> | 1 | <input type="checkbox"/> |
|-------|--------------|--|-----------------|---|-----------------------------|---|--|--|
| | Switch Type | Function | Latching or not | Repeat rate ^[1] | Footprint | # of Switch | Control Mode | DC supply |
| | NS Switch =1 | 1x1, 1x2, 2x1, 2x2 switches = 1a 1x4, 4x1 switches = 4a 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 ^[2] =2 Special =0 |

[1]: The repeat rate is defined for TTL control interface only.

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