## DC-5KHz Driver for NanoSpeed ${ }^{\text {TM }}$ 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 Switch loads.

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

## Features

- High speed
- 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
- Piezoelectric driver
- Pockel Cell driver



## Performance Specifications

| Specs | Min | Typical | Max | Unit |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Rise Time (Tr) ${ }^{1}$ |  | 85 | 100 | ns |  |
| Fall Time (Tf) |  | 85 | 100 | ns |  |
| Switch Speed (Rise) (Sr) ${ }^{3}$ |  | 200 | 250 | ns |  |
| Switch Speed (Fall) (Sf) ${ }^{4}$ |  | 200 | 250 | ns |  |
| Repetition Rate | DC |  | 5 | KHz |  |
| Pulse Width | 1.0 |  | $\geq 1.0$ | us |  |
| Control Input (TTL pulse) | 0 |  | 5 | V |  |
| Power Consumption | 0.6 |  | $2 @ 5 \mathrm{KHz}$ | W |  |
| Power Supply |  | 12 |  | V |  |
| Operating Temperature | -5 |  | 70 | ${ }^{\circ} \mathrm{C}$ |  |
| Storage Temperature | -40 |  | 80 | ${ }^{\circ} \mathrm{C}$ |  |
| Electrical Connector | SMA |  |  |  |  |
| Board Size |  |  |  |  |  |

## 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;
5: Optical Waveform;
6: Dependent on repetition frequency;

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## Response Measurement



## Ordering Information

| SWDR－ | 11 | $\square$ | 2 | $\square$ | 1 | $\square \square$ | $\square$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Type | Repetition | Device | Size |  | \＃of Switch | Connector |
|  |  | $\begin{aligned} & \text { DC } \sim 5 \mathrm{KHz}=1 \\ & \text { Special }=0 \end{aligned}$ |  | $\begin{aligned} & 2.8 " \times 2.0 " \times 1 "=2 \\ & \text { Special=0 } \end{aligned}$ |  | 1 switch＝11 <br> 2 switches＝22 <br> 3 switches＝33 <br> 9 switches＝99 <br> Special＝0 | $\begin{aligned} & \text { SMA }=2 \\ & \text { Special }=0 \end{aligned}$ |

