

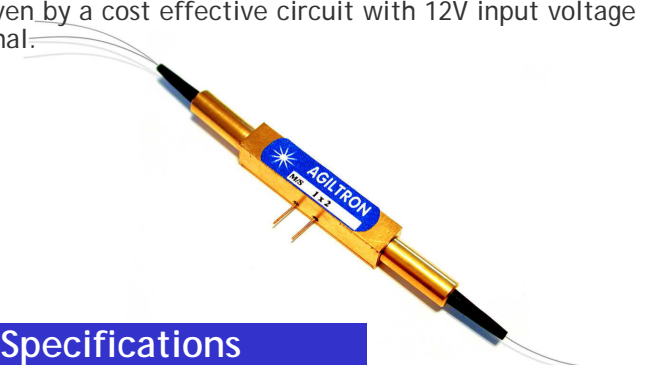
Nano Speed™ 1x1 Fiberoptic PM Switch / On-Off Modulator

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

Product Description

The NS 1x1 fiber optic PM switch/on-off modulator is a fast shutter device featuring very low loss, fast response, and high optical power handling. This is achieved using patented non-mechanical configurations with solid-state all-crystal designs, which eliminates the need for mechanical movement and organic materials. The NS fiberoptic PM switch is designed to meet the most demanding switching requirements of ultra-high reliability, fast response time, and continuous switching operation.

The device can be driven by a cost effective circuit with 12V input voltage and a 0-5V control signal.



Performance Specifications

| NS 1x1 PM Switch/Modulator | Min | Typical | Max | Unit |
|----------------------------|-----|----------------|-------|------|
| Operation Wavelength | 400 | | 1800 | nm |
| Insertion Loss | 0.4 | 0.6 | 1.0 | dB |
| IL Temperature Dependency | | 0.25 | 0.5 | dB |
| Isolation | 20 | 25 | 35 | dB |
| Extinction ratio | 18 | 25 | 30 | dB |
| Return Loss | 45 | 50 | 60 | dB |
| Response Time (Rise, Fall) | | | 300 | ns |
| Repetition Rate | DC | 5 | 300** | KHz |
| Operating Temperature | -5 | | 70 | °C |
| Optical Power Handling | | 300 | 500 | mW |
| Storage Temperature | -40 | | 85 | °C |
| Fiber Type | | Panda PM fiber | | |
| Package Dimension | | 57.5x7.35x9.7 | | mm |

* Driver kit is recommended.

** Special circuit

Features

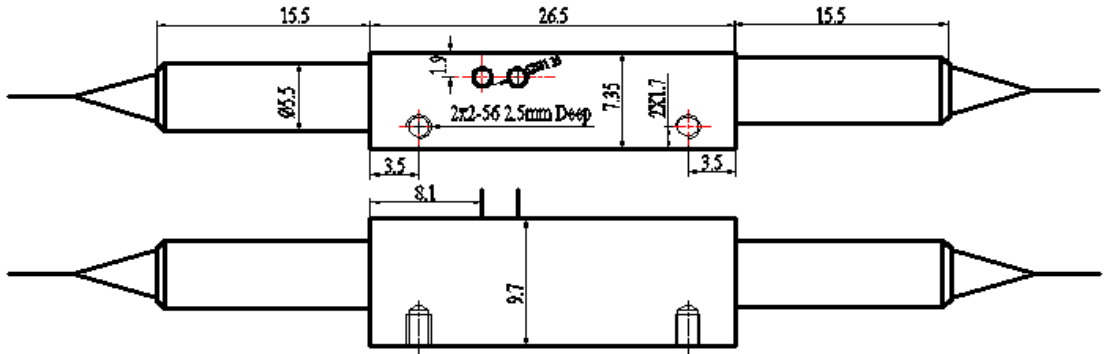
- Solid-State high speed
- Ultra-high reliability
- Low insertion loss
- Compact size
- Low cost
- Simple driver
- Low power consumption

Applications

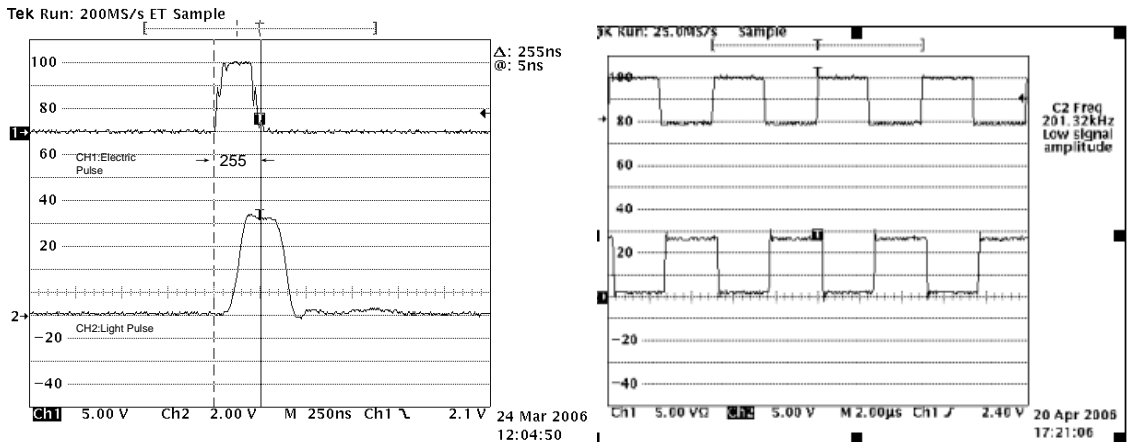
- Optical blocking
- Light path re-directing
- Instrumentation

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Mechanical Dimensions (mm)

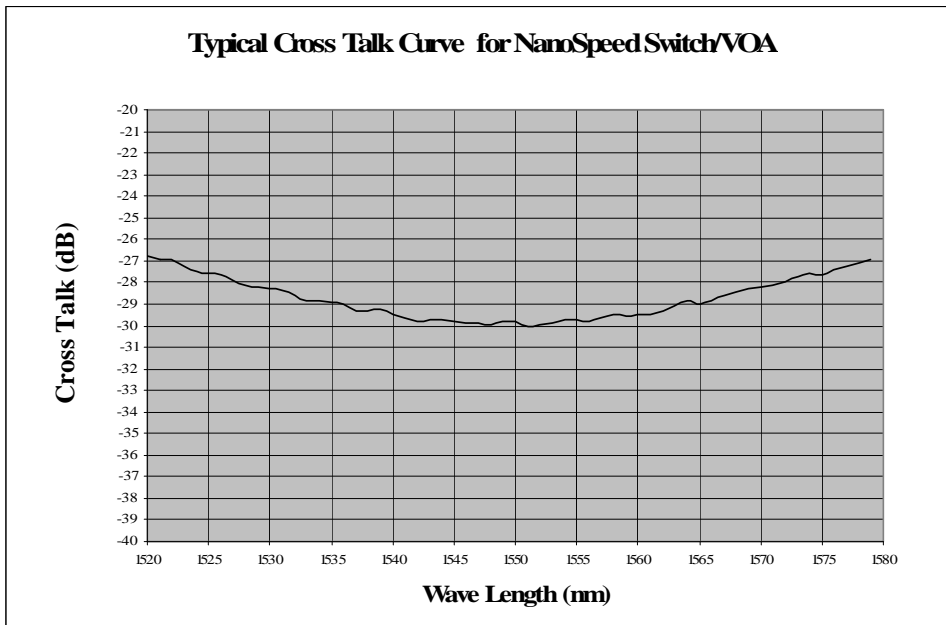


Speed and Repetition Measurement



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Bandwidth Measurement



Ordering Information

| NSSW- | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1 | 1 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|-------|--------------------------|---|--------------------------|---------|---|---|---|--|--------------------------|
| | Type | Wavelength | Configuration | Package | Fiber Type | | Fiber Length | Connector | |
| | 1X1=11 | 1060=1 L=2 1310=3 1410=4 1550=5 650=6 780=7 850=8 Special=0 | | | Panda PM fiber 400=4 Panda PM fiber 250=5 Special=0 | Bare fiber =1 900um loose tube=3 Special=0 | 0.25m=1 0.5m=2 1.0 m=3 Special=0 | None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC=7 Special=0 | |