

NanoSpeedTM High Power 1x1 Solid-State Fiberoptic PM Switch

(patent pending)

Product Description

The NS High Power Series 1x1 solid-state fiber optic PM switch connects optical channels by redirecting an incoming optical signal into a selected output optical fiber. This is achieved using patent pending non-mechanical configurations with solid-state all-crystal designs, which eliminates the need for mechanical movement and organic materials. The NS high power 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 12 V input voltage and a 0-5 V control signal

Features

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

Performance Specifications

| NH Series 1x1 PM Switch | 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 | | | 5*** | W | |
| Storage Temperature | -40 | | 85 | °C | |
| Fiber Type | Panda PM fiber | | | | |
| Package Dimension | | mm | | | |
| Driver kit is recommended | • | | | • | |

Driver kit is recommended

Applications

- Optical blocking
- Light path re-directing
- Instrumentation

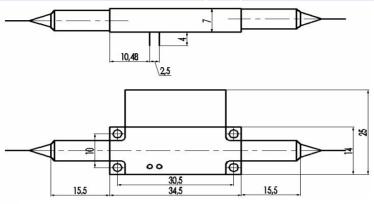
^{**} Special circuit

Continuous operation, for pulse operation call

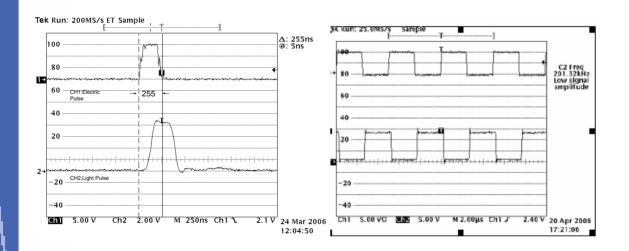


Nano Speed™ High Power 1x1 Solid-State Fiberoptic PM Switch

Mechanical Dimensions (mm)



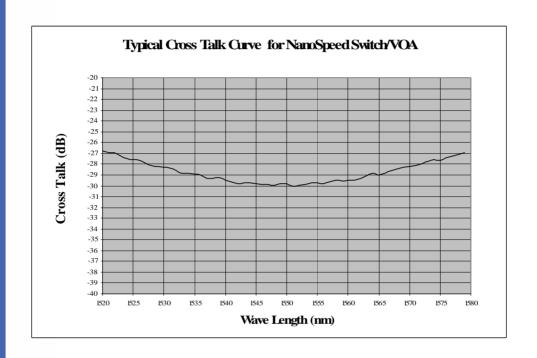
Speed and Repetition Measurement





Nano Speed™ High Power 1x1 Solid-State Fiberoptic PM Switch

Bandwidth Measurement



Ordering Information

| NHSW- | | | 1 | 1 | | | | |
|-------|--------|-------------------------------|---------------|---------|---|---|---|--|
| | Туре | Wavelength | Configuration | Package | Fiber Type | Fiber Length | | Connector |
| | 1X1=11 | 1550=5 1310=3 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 |

