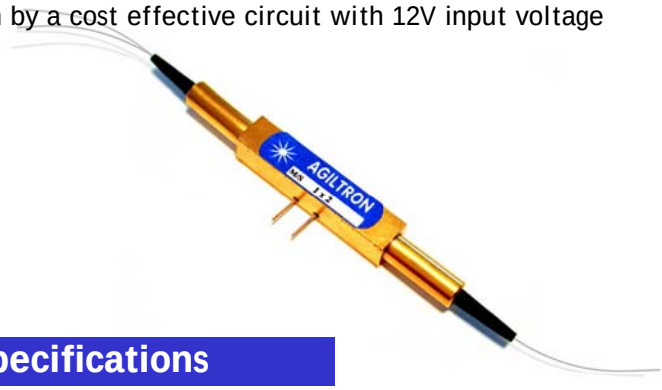
NanoSpeed™
1x2 Fiberoptic Switch

(patent pending)

Product Description

The NS Series 1x2 solid-state fiber optic 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 fiberoptic 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 0-5 V control signal



Features

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

Performance Specifications

NS Series 1x2 Switch	Min	Typical	Max	Unit
Operation Wavelength	400		1800	nm
Insertion Loss	0.4	0.6	1.0	dB
Cross Talk	20	25	35	dB
Polarization Dependent Loss		0.15	0.35	dB
IL Temperature Dependency		0.25	0.5	dB
Polarization Mode Dispersion		0.1	0.3	ps
Return Loss	45	50	60	dB
Response Time (Rise, Fall)			300	ns
Repetition Rate	DC	5	300**	KHz
Operating Temperature	-5		70	^{o}C
Optical Power Handling		300	5000***	mW
Storage Temperature	-40		85	^{o}C
Package Dimension		65.8x8.5x8.4		mm

*Driver kit is recommended
** Special circuit
*** Special order

Applications

- Optical blocking
- Configurable operation
- Instrumentation

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www.agiltron.com

Revision: 060-13
10-29-08

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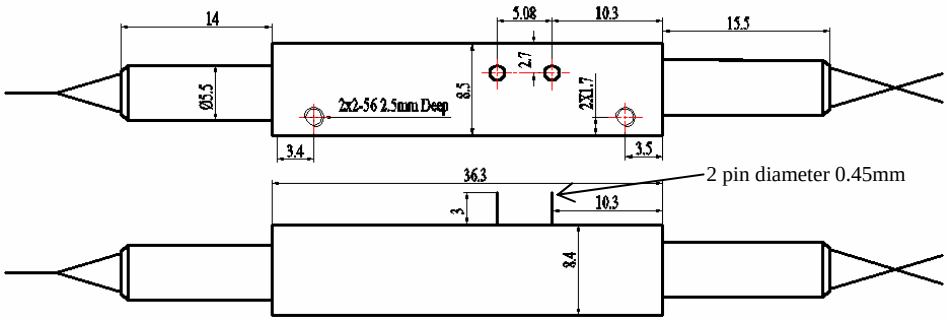
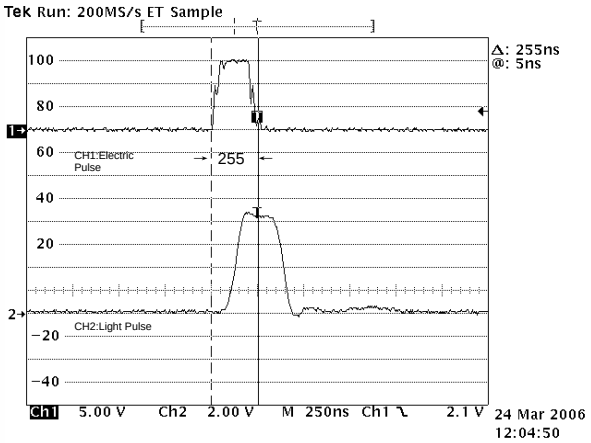
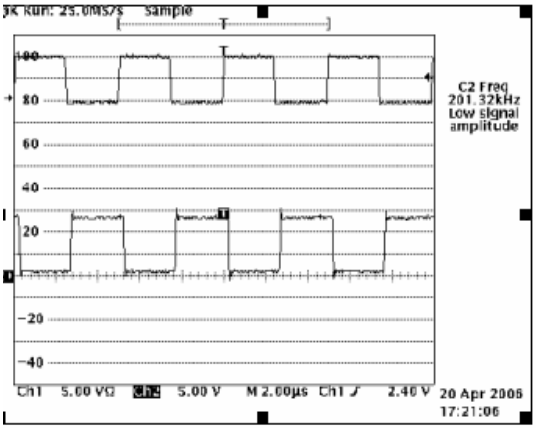
Mechanical Dimensions (mm)



Speed and Repetition Measurement





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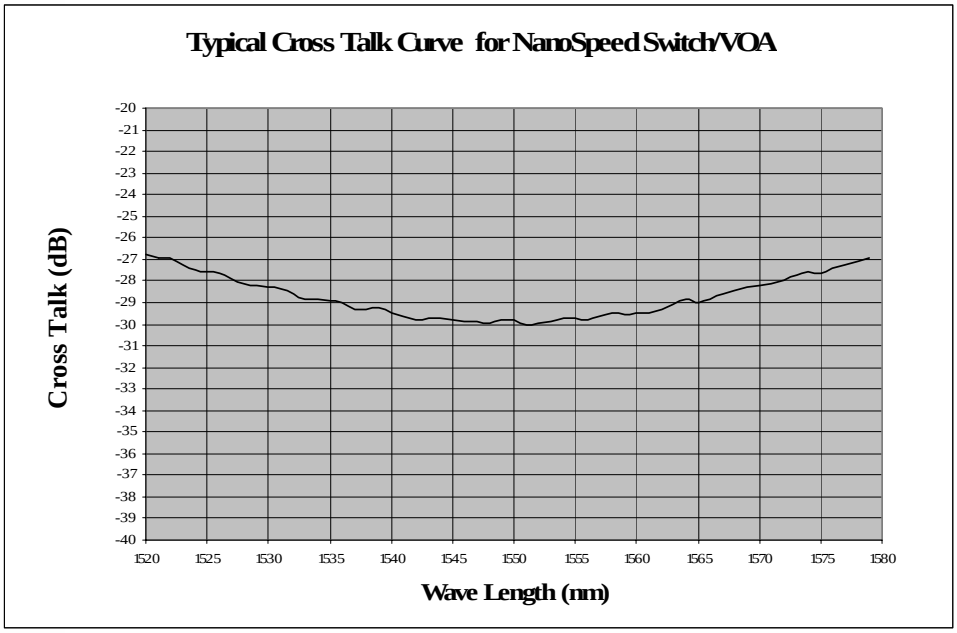
Bandwidth Measurement



Ordering Information

NSSW-	☐☐	☐	1	1	1	☐	☐	☐
	Type	Wavelength	Configuration	Package	Fiber Type		Fiber Length	Connector
	1x2=12	1310=3 1550=5 Special=0			SMF-28=1 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 Duplex LC=8 Special=0