NanoSpeed™ 1x2 Fiberoptic Switch

(Bidirectional)

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

Features

- Solid-State
- High speed
- Ultra-high reliability
- Low insertion loss
- Compact

Applications

- Optical blocking
- Configurable operation
- Instrumentation

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 fiber-optic switch is designed to meet the most demanding switching requirements of ultra-high reliability, fast response time, and continuous switching operation. The device is bidirectional.

Agiltron's PCB driver listed in the web is recommended to operate this device, featuring high efficiency and low cost with 12V DC power and TTL control signal.

Performance Specifications

NS Series 1x2 Switch		Min	Typical	Max	Unit
Central Wavelength		780		2000	nm
Insertion Loss[1]	1260~1650nm		0.6	1.0	dB
	960~1260nm		0.8	1.3	dB
	760~900nm		1.0	1.5	dB
Cross Talk		20	25	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 [2]		DC	5		kHz
Operating Temperature		-5		70	°C
Optical Power Handling [3]			300		mW
Storage Temperature		-40		85	°C
Package Dimension			65.8x8.5x8.4		mm

[1] Excluding connectors.
[2] Standard driver. High repetition rate (up to 500 KHz) is available with special circuit, please call us.
[3] Defined at 1550nm. For the shorter wavelength, the handling power may be reduced. High power version (up to 5W) for 1310nm, 1550nm is available; please call us for more information.

15 Presidential Way, Woburn, MA 01801 Tel: (781) 9351200 Fax: (781) 935-2040
www.agiltron.com

Revision: 070-16
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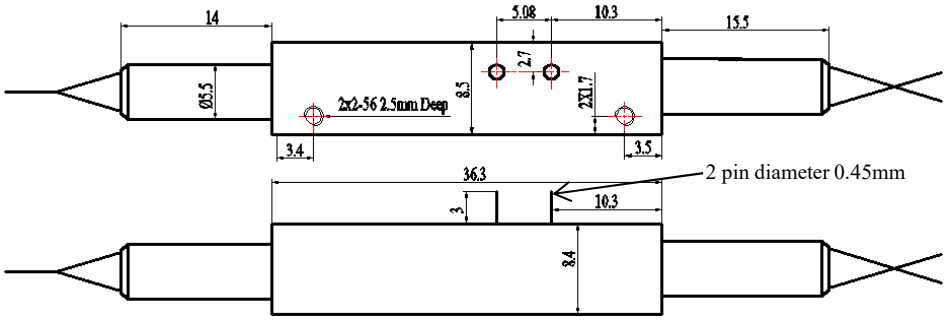
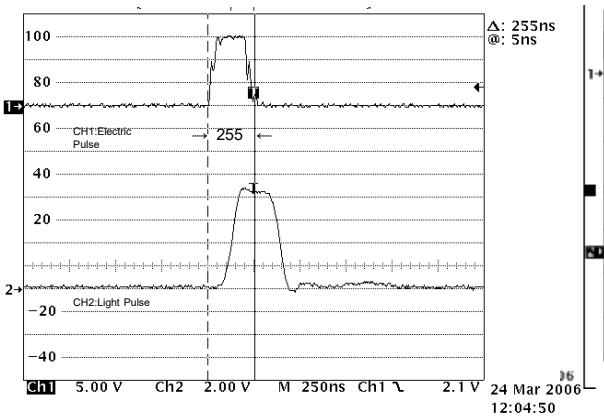
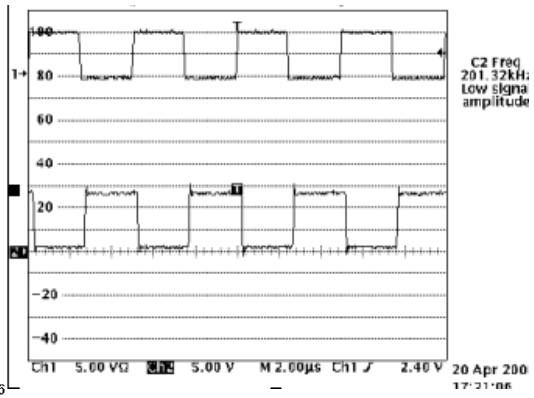
Mechanical Dimensions (mm)



Speed and Repetition Measurement





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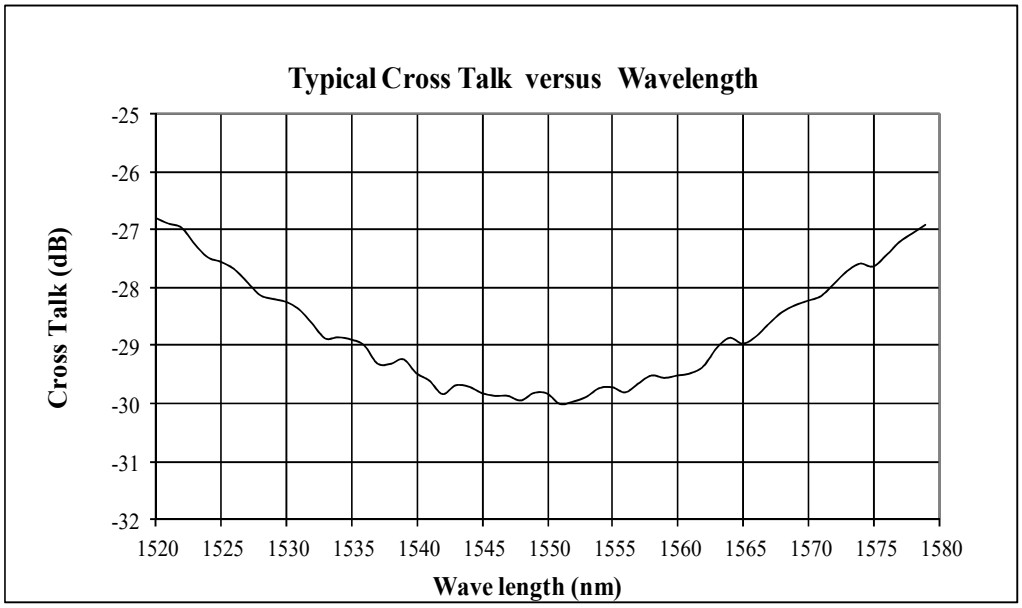
Bandwidth Measurement



Ordering Information

NSSW-	1 2	☐	1	1	☐	☐	☐	☐
	Type	Wavelength	Configuration	Package	Fiber Type		Fiber Length	Connector
	1x2=12	1060=1 L Band=2 1310=3 1410=4 1550=5 780=7 850=8 Special=0			SMF-28=1 HI1060=2 HI780=3 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/PC=7 Duplex LC=8 LC/APC=9 Special=0

* For 1060nm or short wavelength. Please refer to NS High Power 1x2 Switch.

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