NanoSpeed™ High Power 1x2 Fiber Optical Switch

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

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. It is intrinsically bidirectional and varable coupler behavior between the two ports. 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.

Features

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

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

NH 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
Cross Talk		20	25		dB
Polarization Dependent Loss			0.15	0.35	dB
Polarization Extinction Ratio[4]		19	22	35	dB
IL Temperature Dependency			0.25	0.5	dB
Polarization Mode Dispersion			0.1	0.3	ps
Return Loss		45	50		dB
Response Time (Rise, Fall)				300	ns
Repetition Rate [2]		DC	5		kHz
Operating Temperature		-5		70	°C
Optical Power Handling [3]				5	W
Storage Temperature		-40		85	°C
Package Dimension			65.5x23.5x6.5		mm

[1] Measured without connectors
[2] Standard driver. High repetition rate (up to 500 KHz) is available with special circuit, please call us.
[3] Defined at 1310nm and 1550nm and CW operation, for pulse operation call
[4] Pm fiber only

Applications

- Optical blocking
- Configurable operation
- Instrumentation

RoHS Compliant

07-18-20

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

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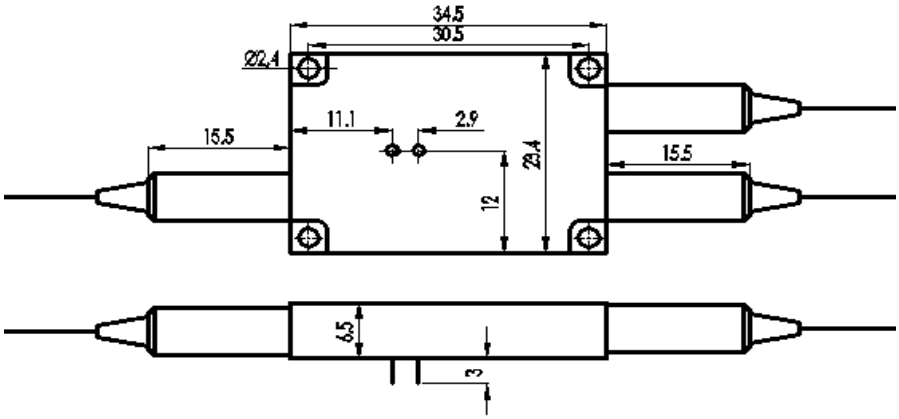
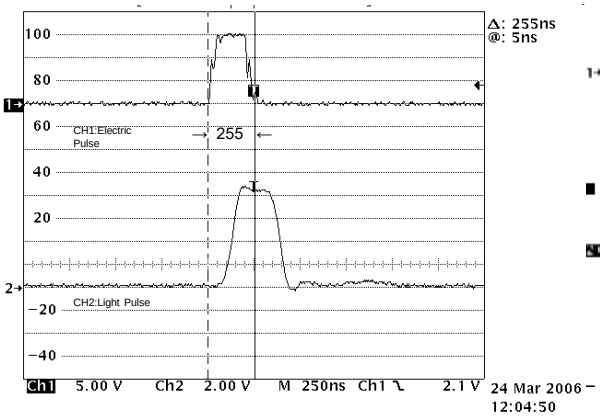
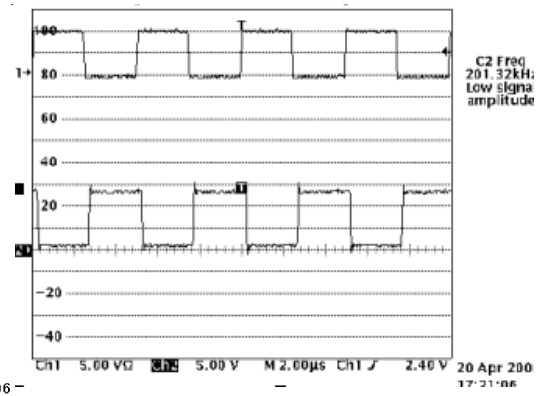
Mechanical Dimensions (mm)



Speed and Repetition Measurement





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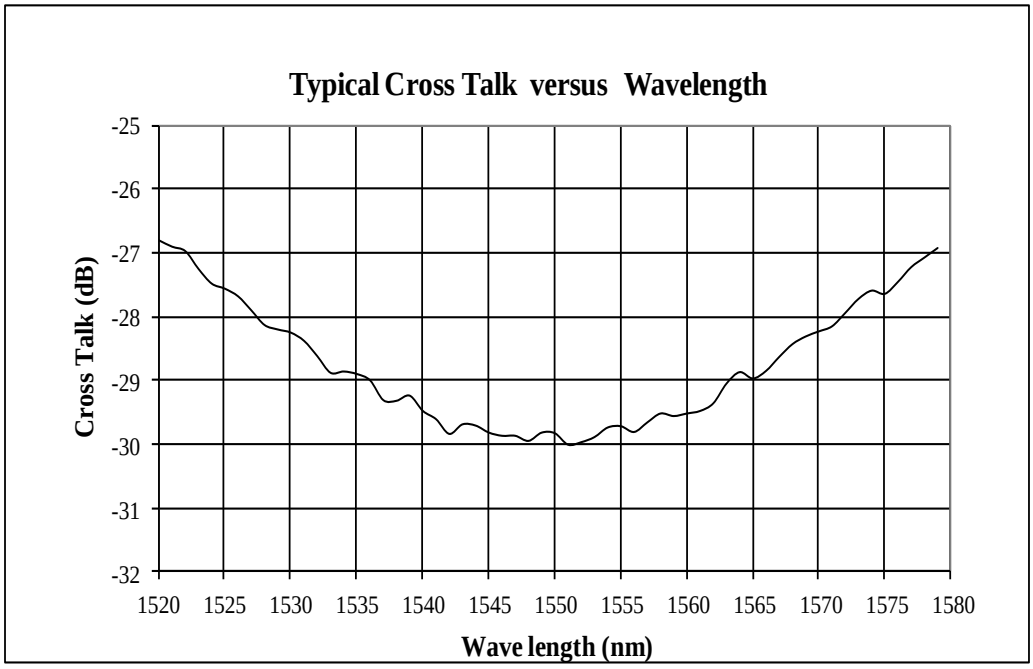
Bandwidth Measurement



Ordering Information

	1 2		1	1				1*
	Type	Wavelength	Configuration	Package	Fiber Type		Fiber Length	Connector
NHSW=2W NHHW=5W		1060=1 L Band=2 1310=3 1550=5 980=9			SMF-28=1 PM1550 =5 HI-1060=2 Special=0	Bare fiber=1 900um tube=3 Special=0	0.25m= 1 0.5m = 2 1.0 m= 3 Special =0	No connector = 1 FC-PC = 2

* Agiltron provide high power connector, please call.

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