

NanoSpeed™ Broadband 1x2 Fiberoptic Switch

(patent pending)

Product Description

The NS broadband 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 configuration eliminates waveplates for a wide wavelength operation. The NS fiberoptic switch is designed to meet the most demanding switching requirements of ultra-high reliability, fast response time, continuous switching and bidirectional 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 Broadband 1x2 Switch	Min	Typical	Max	Unit
Central wavelength	760		1650	nm
Insertion Loss ^[1]	1260-1650nm	0.8	1.2	dB
	960-1200nm	1.0	1.5	dB
	760-960nm	1.0	1.6	dB
Cross Talk	20	25		dB
Polarization Dependent Loss		0.15	0.35	dB
IL Temperature Dependency		0.25	0.5	dB
Polarization Mode Dispersion		5	6	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		300		mW
Storage Temperature	-40		85	°C
Package Dimension		70.5x18x6.5		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; please call us for more information.

Features

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

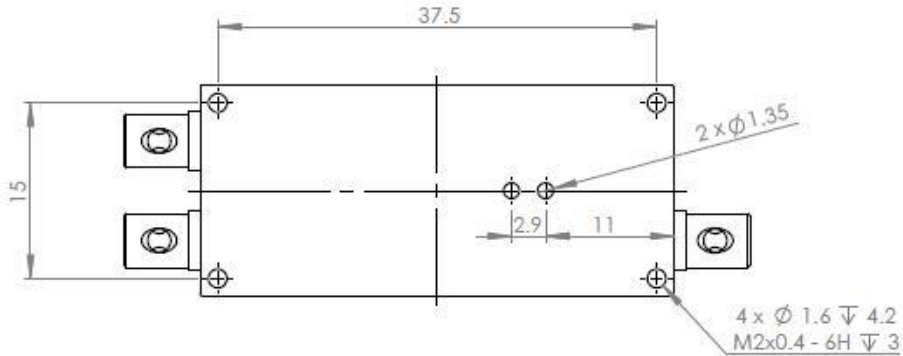
Applications

- Optical blocking
- Configurable operation
- Instrumentation

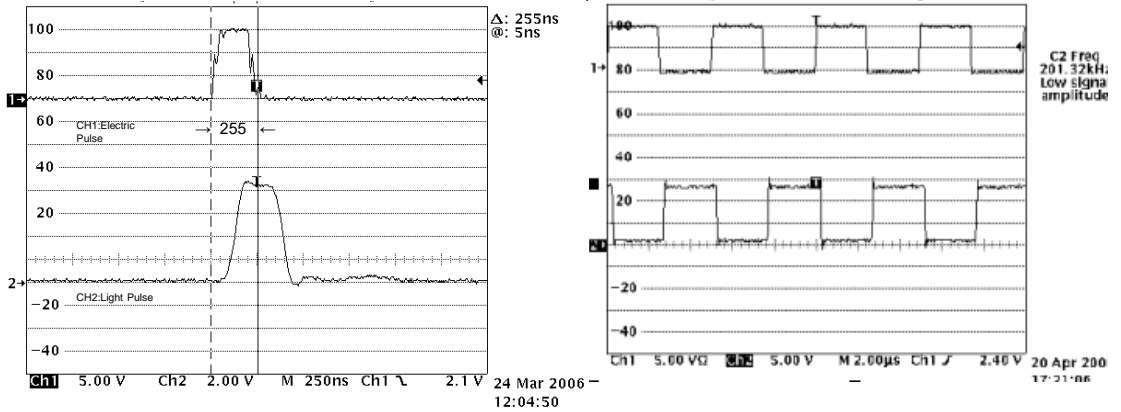


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Mechanical Dimensions (mm)

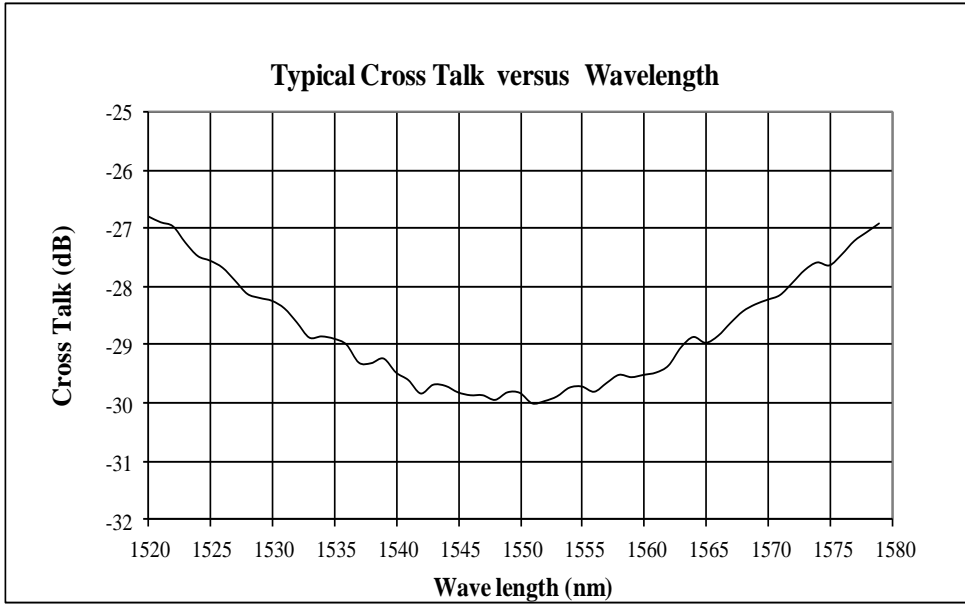


Speed and Repetition Measurement



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Bandwidth Measurement at specified wavelength



Ordering Information

NSBW-	1 2	<input type="checkbox"/>	1	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Type	Wavelength	Configuration	Package	Fiber Type	Fiber Length	Connector	
	1x2=12	1260-1650=1 960-1200=2 760-960=3			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 LC/APC=8 Special=0

