

NanoSpeed™ 1x2 Solid-State PM Fiberoptic Switch (Bidirectional)

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

Product Description

The NS Series 1x2 solid-state PM fiber optic switch connects optical channels by redirecting an incoming optical signal into a selected output optical fiber. This is achieved using patented non-mechanical configurations with solid-state all-crystal designs, which eliminates the need for mechanical movement and organic materials. The NS fiber optic PM switch is designed to meet the most demanding switching requirements of ultra-high reliability, fast response time, and continuous switching operation. The switch 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.

Features

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

Performance Specifications

NS Series 1x2 PM 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
	760-960nm	1.0	1.5	dB
IL Temperature Dependency		0.25	0.5	dB
Cross Talk	20	25	35	dB
Extinction ratio	18	25	30	dB
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		300		mW
Storage Temperature	-40		85	°C
Fiber Type		Panda PM fiber		
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.

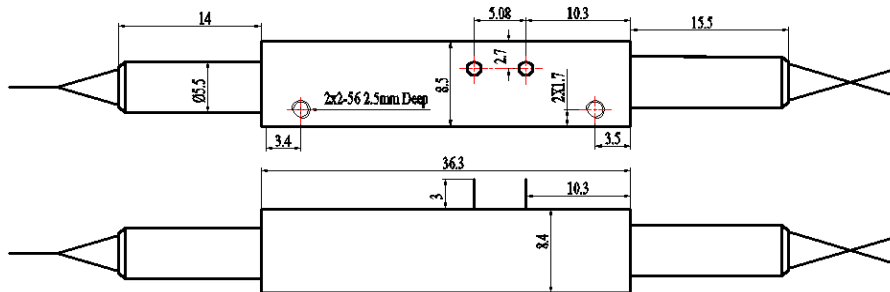
Applications

- Optical blocking
- Configurable light path
- Instrumentation

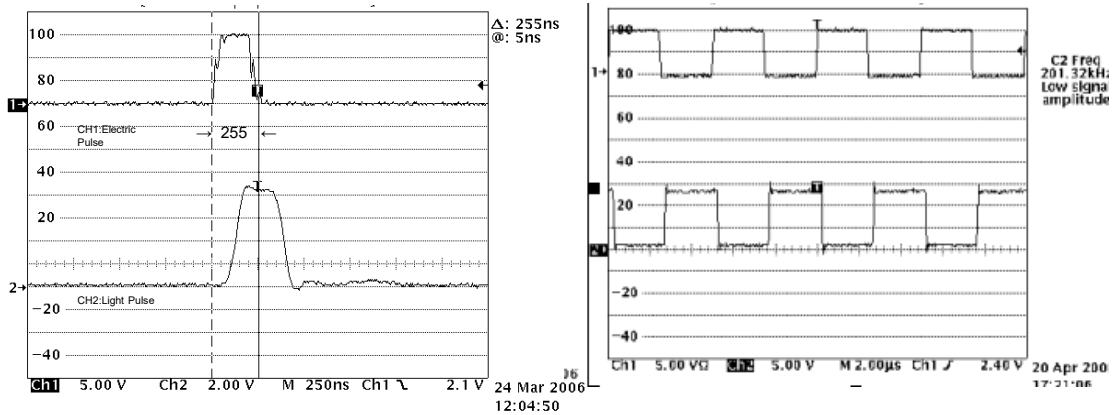


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Mechanical Dimensions (mm)

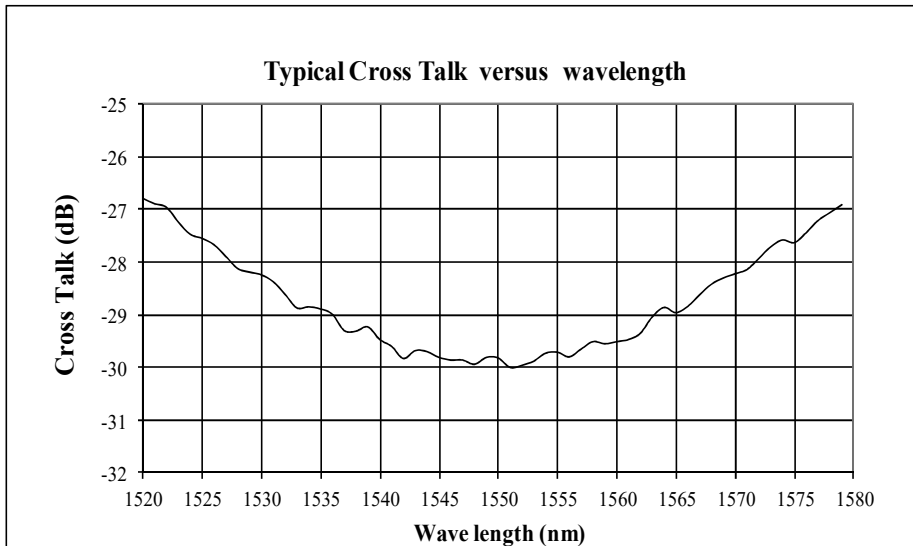


Speed and Repetition Measurement



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Bandwidth Measurement



Ordering Information

NSSW-	1 2	<input type="checkbox"/>	1	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Type	Wavelength	Configuration	Package	Fiber Type		Fiber Length	Connector
	1X2=12	1060=1 L Band=2 1310=3 1550=5 780=7 850=8 980=9			PM 1550/400=4 PM 1550/250=5 PM980=9 PM850=8 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.