Nano Speed™
1x1 Solid-State Fiberoptic PM Switch

Product Description

The NS Series 1x1 solid-state fiber optic PM switch connects optical channels by redirecting an incoming optical signal into a selected output optical fiber. This is achieved using a patent pending non-mechanical configuration with solid-state all-crystal design which eliminates the need for mechanical movement and organic materials. The NS fiberoptic PM switch is designed to meet the most demanding switching requirement 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 0-5V control signal

Features

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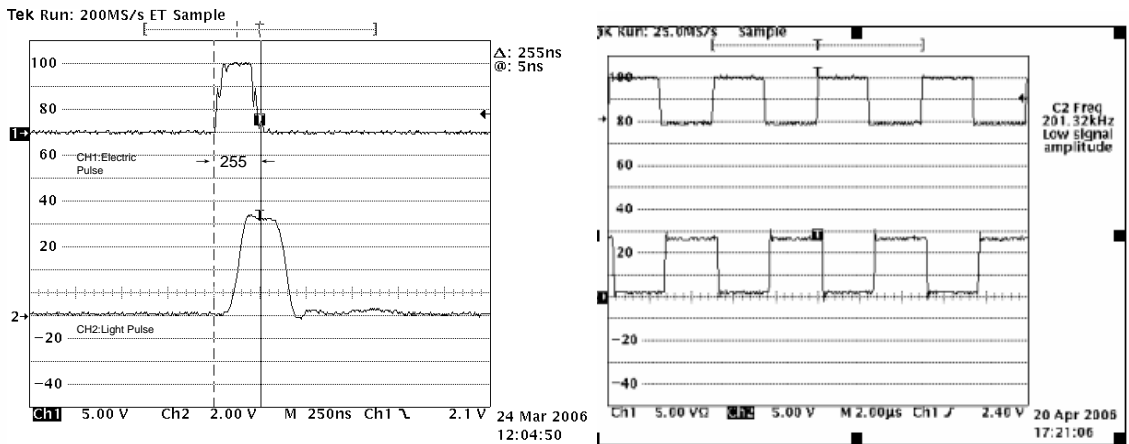- Low power consumption

Applications

- Optical blocking
- Light path re-directing
- Instrumentation

Performance Specifications

NS Series 1x1 PM Switch	Min	Typical	Max	Unit
Operation Wavelength	400		1800	nm
Insertion Loss	0.4	0.6	1.0	dB
IL Temperature Dependency		0.25	0.5	dB
Isolation	20	25	35	dB
Extinction ratio	18	25	30	dB
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	500	mW
Storage Temperature	-40		85	^{o}C
Fiber Type	Panda PM fiber			
Package Dimension		57.5x7.35x9.7		mm

* Driver kit is recommended.
** Special circuit

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Mechanical Dimensions (mm)
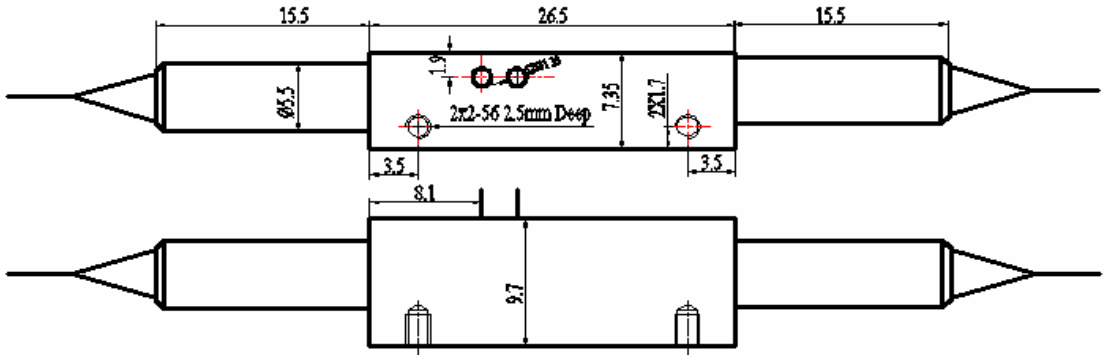
Speed and Repetition Measurement

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Bandwidth Measurement

Typical Cross Talk Curve for NanoSpeed Switch/VOA
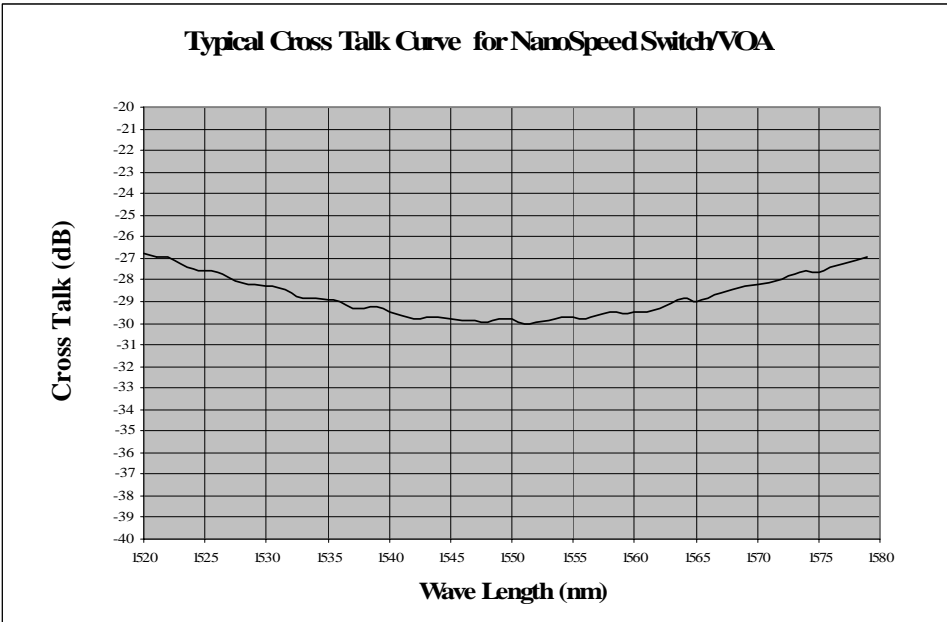
Ordering Information

NSSW-	Type	Wavelength	Configuration	Package	Fiber Type		Fiber Length	Connector
			1	**1**				
	1X1=11	1550 =5 1310 = 3 Special = 0			Panda PM fiber 400=4 Panda PM fiber 250=5 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 Special = 0