

# Nano Speed™ 1x1 Fiberoptic PM Switch / On-Off Modulator

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

## Product Description

The NS 1x1 fiber optic PM switch/on-off modulator is a fast shutter device featuring very low loss, fast response, and high optical power handling. 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 fiberoptic PM switch is designed to meet the most demanding switching requirements 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 a 0-5V control signal.



## Performance Specifications

NS 1x1 PM Switch/Modulator	Min	Typical	Max	Unit
Operation Wavelength	400		2005	nm
Insertion Loss <sup>1</sup>	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	°C
Optical Power Handling		300	500	mW
Storage Temperature	-40		85	°C
Fiber Type		Panda PM fiber		
Package Dimension		57.5x7.35x9.7		mm

\* Driver kit is recommended.

\*\* Special circuit

1. Excluding connectors

## Features

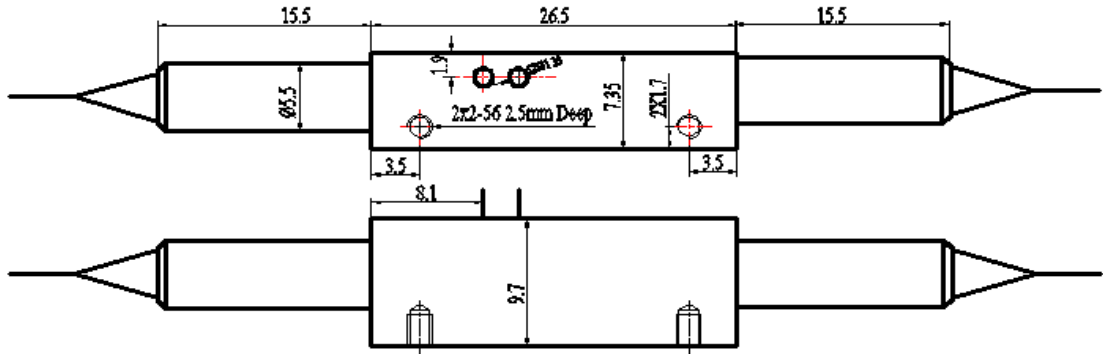
- Solid-State high speed
- Ultra-high reliability
- Low insertion loss
- Compact size
- Low cost
- Simple driver
- Low power consumption

## Applications

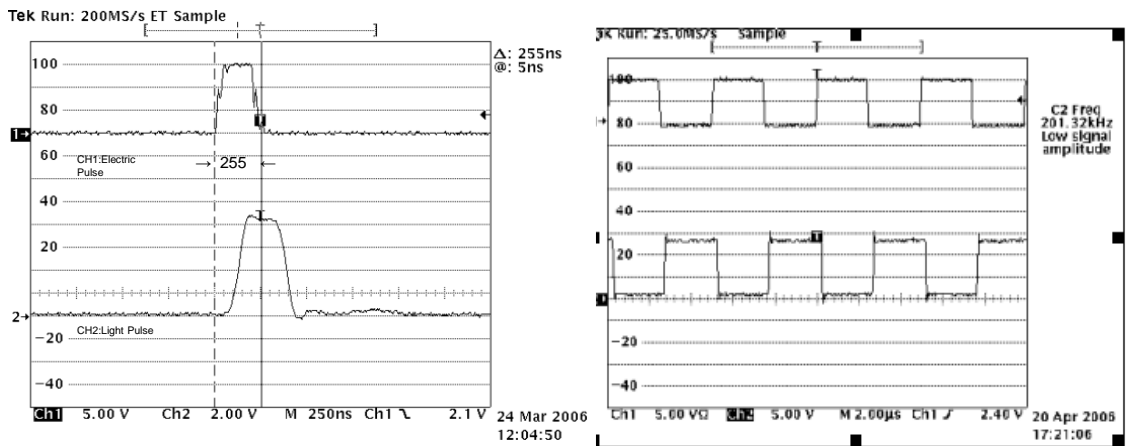
- Optical blocking
- Light path re-directing
- Instrumentation

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## Mechanical Dimensions (mm)

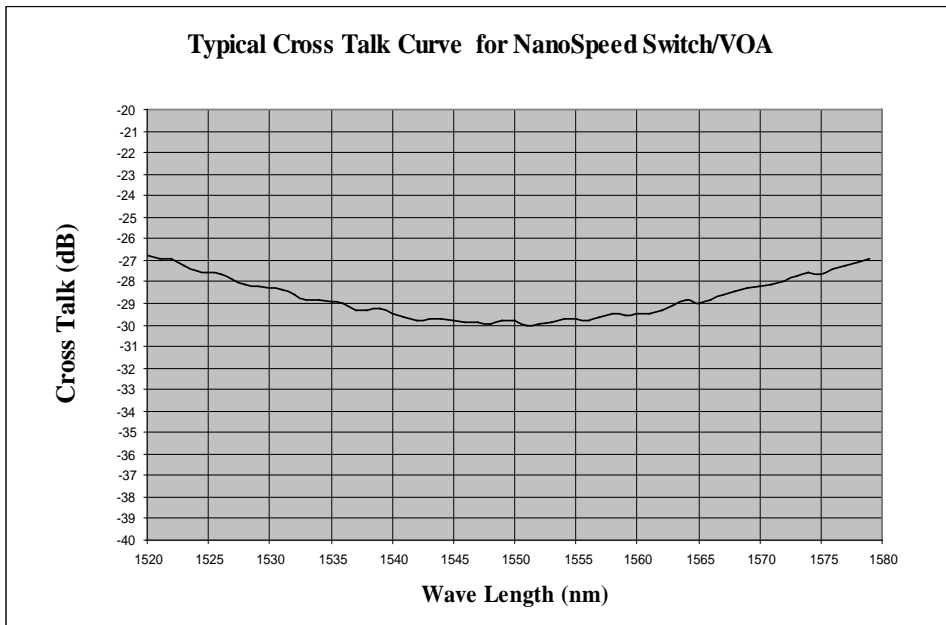


## Speed and Repetition Measurement



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## Bandwidth Measurement



## Ordering Information

NSSW-	<input type="checkbox"/>	<input type="checkbox"/>	<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				
1X1=11	1060=1 L Band=2 1310=3 1410=4 1550=5 650=6 780=7 850=8 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			