

# Nano Speed™ High Power 1x1 PM Fiberoptic Switch / On-Off Modulator (Bidirectional)

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

## Product Description

The NS high power PM 1x1 fiber optic 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 high power fiberoptic 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.

The device can be driven by a cost effective circuit with 12 V input voltage and a 0-5 V control signal.



## Performance Specifications

NH 1x1 PM Switch/Modulator	Min	Typical	Max	Unit
Operation Wavelength	780		2000	nm
Insertion Loss <sup>1</sup>		0.6	1.0	dB
IL Temperature Dependency		0.25	0.5	dB
Isolation	20	25		dB
Extinction ratio	18	25	30	dB
Return Loss	45	50		dB
Response Time (Rise, Fall)			300	ns
Repetition Rate**	DC	5		KHz
Operating Temperature	-5		70	°C
Optical Power Handling			5***	W
Storage Temperature	-40		85	°C
Fiber Type	Panda PM fiber			
Package Dimension	65.5x25x7			mm

\* Driver kit is recommended

\*\* Standard driver. High repetition rate (up to 500 KHz) is available with special circuit.

\*\*\* Continuous operation, for pulse operation call.

1. Excluding connectors.

## Features

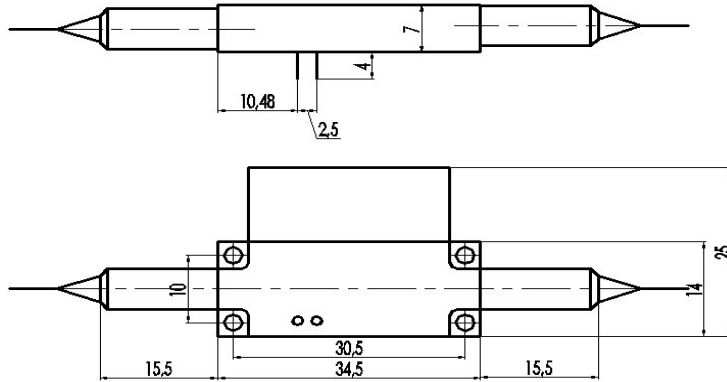
- Solid-State high speed
- Ultra-high reliability
- Low insertion loss
- Compact size
- Low cost
- Simple driver
- Low power consumption

## Applications

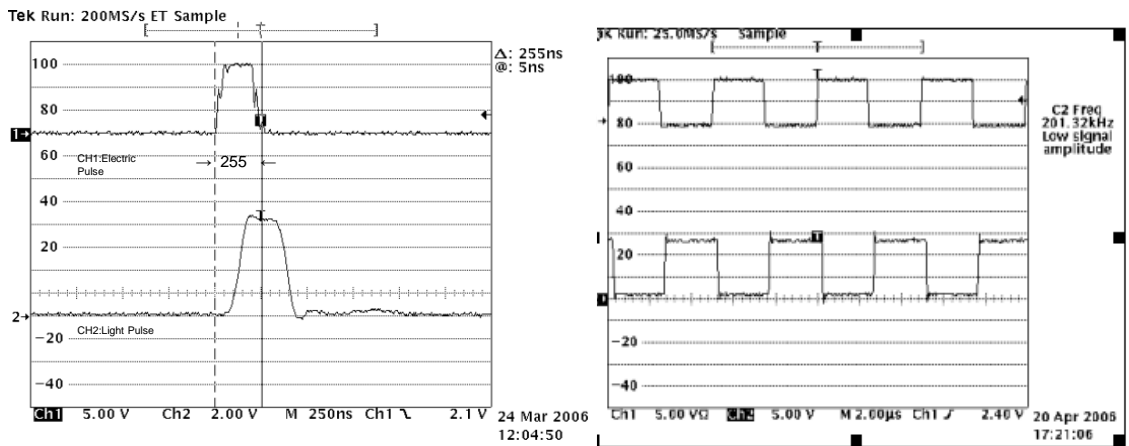
- Optical blocking
- Light path re-directing
- Instrumentation

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

## Mechanical Dimensions (mm)

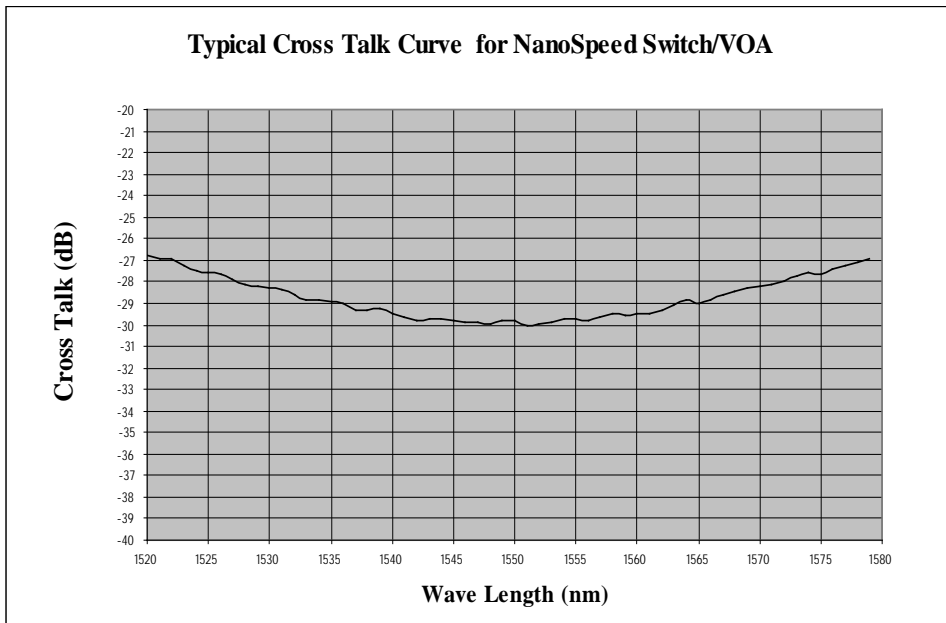


## Speed and Repetition Measurement



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

## Bandwidth Measurement



## Ordering Information

NHSW-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1*
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			

\* Agiltron provide high power connector, please call.