NanoSpeed™ PM fiber Variable Optical Attenuator/Modulator

(Bidirectional)

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

Features

- Solid state
- High Speed
- High Reliability
- Low Insertion Loss
- Compact

Applications

- Power Control
- Power Regulation
- Power Balance
- Instrumentation

Product Description

The NS Series Variable Fiber Optic Attenuator provides electrical control of optical power. This is achieved using a patent pending non-mechanical configuration and activated via a voltage electrical control signal. The solid-state optical crystal design eliminates all mechanical movement and organic materials. The NS Series Variable Optical Attenuators are designed to meet the most demanding operation requirements of ultra-high reliability and fast response time with minimal mechanical footprint. The switch is bidirectional.

The NS Series VOA is available in either normally-transparent or normally-opaque configurations.

Agiltron's PCB driver listed in the web is recommended to operate this device, featuring high efficiency and low cost with 12VDC power and 0-5V control input.

Performance Specifications

NS Variable Optical Attenuator		Min	Typical	Max	Unit
Central Wavelength		780		1800	nm
Insertion Loss [1]	1260~1800nm		0.6	1.0	dB
	960~1260nm		0.8	1.3	dB
	760~960nm		1.0	1.5	dB
Extinction Ration(ER)		18	25	30	dB
Return Loss		45	50		dB
Attenuation Range		20	28	36	dB
Response Time (Rise, Fall)				300	ns
Repetition Rate		DC	5	100 [2]	kHz
Modulation Rate				5 [3]	MHz
Resolution			Continuous		dB
Operating Optical Power[4]				500	mW
Operating Temperature			-5 ~ 70		°C
Storage Temperature			-40 ~ 85		°C
Fiber Type			PM Panda fiber		
Package Dimension			56x7.35x9.7		mm

[1] Measured without connectors
[2] Special circuit, 100% depth
[3] Special circuit for narrow frequency range, maximum modulation depth is 5~10%
[4] It is defined at 1550nm. Please call us for other wavelength.

RoHS Compliant

Revised on 2-6-2017

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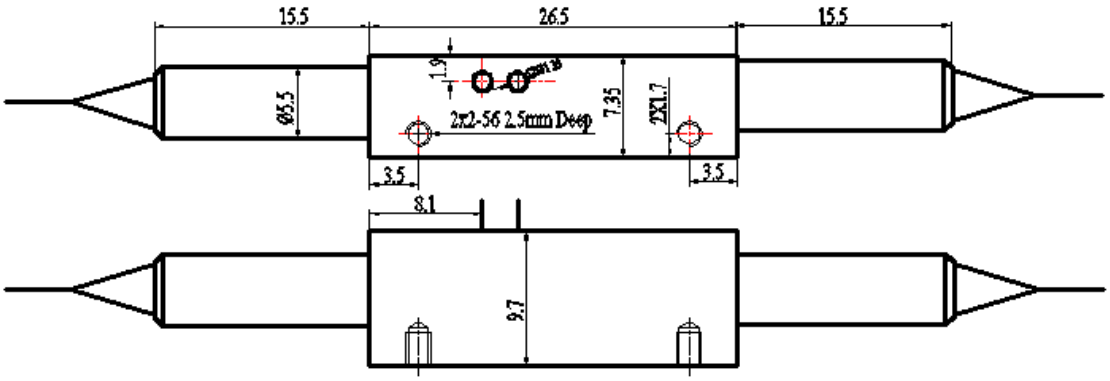
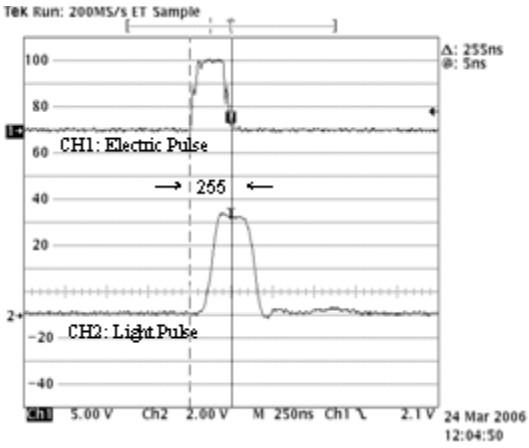
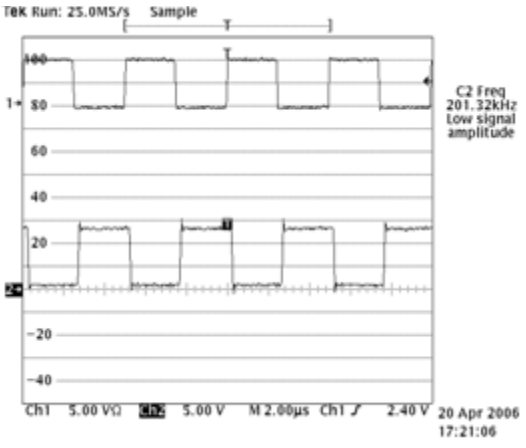
Mechanical Footprint Dimensions (Unit:mm)



Speed and Repetition Measurement





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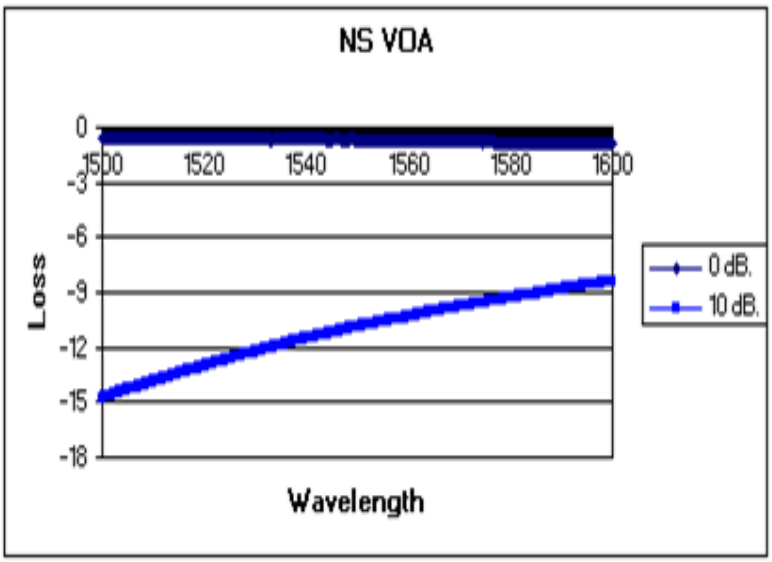
Specify wavelength dependent loss @ 10dB attenuation



Ordering Information

NVOA-	3 2	☐	☐	1	☐	☐	☐	☐
	Type	Wavelength	State	Package	Fiber Type		Fiber Length	Connector
	Regular Slope=2	1060=1 L Band=2 1310=3 1550=5 780=7 850=8	Transparent=1 Opaque=2		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

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