

NanoSpeed™ High Power PM fiber Variable Optical Attenuator/Modulator (Bidirectional)

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

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

NH Variable Optical Attenuator	Min	Typical	Max	Unit
Central Wavelength	900		1800	nm
Insertion Loss ^[1]	1260~1800nm	0.6	1.0	dB
	960~1260nm	0.8	1.3	dB
	850~960nm	1.0	1.5	dB
Extinction Ratio	18	25	30	dB
Return Loss	45	50		dB
Attenuation Range	20	28	36	dB
Response Time (Rise, Fall)			300	ns
Repetition Rate ^[2]	DC	5	100	kHz
Modulation Rate ^[3]	0.1		5	MHz
Resolution		Continuous		dB
Operating Optical Power ^[4]			5	W
Operating Temperature		-5 ~ 70		°C
Storage Temperature		-40 ~ 85		°C
Fiber Type		PM Panda fiber		
Package Dimension		See design		mm

[1] Excluding connectors.

[2] 5kHz repeat rate is in the standard Agiltron's driver. High repetition rate of 100 kHz with 100% modulation depth is available with special circuit, please call us.

[3] Special circuit for narrow frequency range, maximum modulation depth is 5-10%

[4] It is defined at 1550nm. Please call for other wavelength.

Features

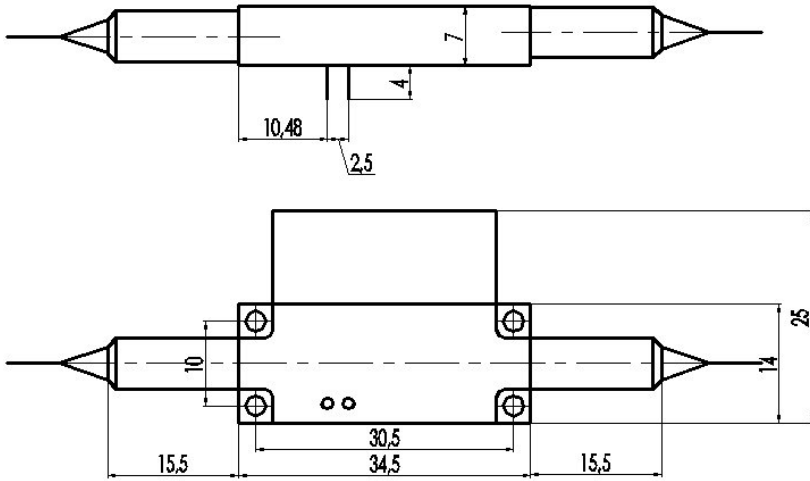
- Solid state
- High Speed
- High Reliability
- Low Insertion Loss
- Compact

Applications

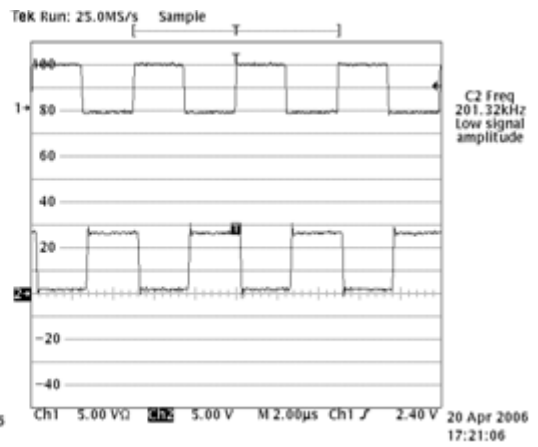
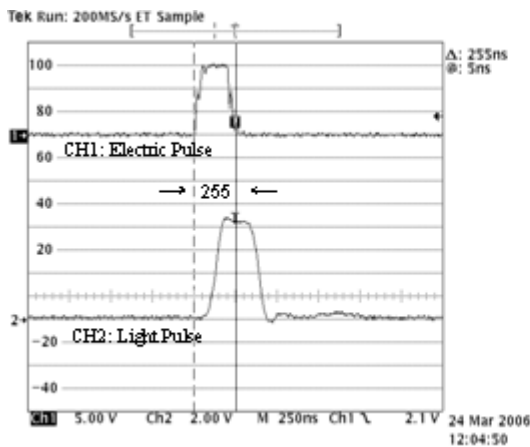
- Power Control
- Power Regulation
- Power Balance
- Instrumentation

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Mechanical Footprint Dimensions (Unit:mm)

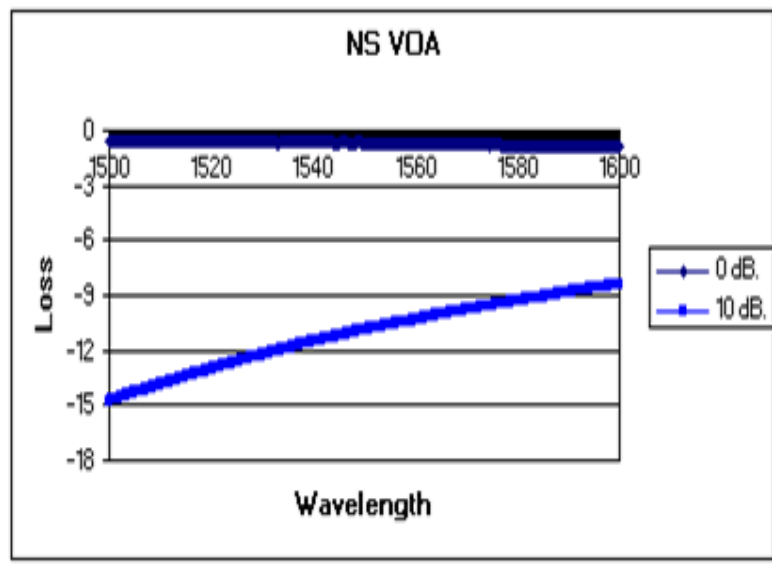


Speed and Repetition Measurement



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Specify wavelength dependent loss @10dB attenuation



Ordering Information

NHOA-	3 2	<input type="checkbox"/>	<input type="checkbox"/>	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1*
Type	Wavelength	State	Package	Fiber Type	Fiber Length	Connector		
	1060=1 L Band=2 1310=3 1550=5 900=9	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		

* Agiltron provide high power connector, please call.