

# NanoSpeed™ Dual VOA + PM Splitter

(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 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. Agiltron also offers customized electronic designs to meet special control requirements and applications.

The NS Dual VOA+PM Splitter has a single mode fiber input and two polarization maintaining fiber outputs. A light beam enters the device and is split by polarization into two outputs whose intensities can be individually varied. The device can be driven by a cost effective circuit with 12 V input voltage and 0-5 V control signal.



## Features

- No Moving Parts
- High Reliability
- Solid-State High Speed
- Low Insertion Loss
- Epoxy-Free Optical Path
- Low Power Consumption
- Simple Driver

## Performance Specifications

NS Dual VOA + PM Splitter	Min	Typical	Max	Unit
Wavelength	400		1800	nm
Insertion Loss <sup>1</sup>		0.5	1.0	dB
Polarization Extinction Ratio			20	dB
Differential Insertion Loss		0.2		dB
Return Loss	45	50		dB
Attenuation Range	25	28	36	dB
Response Time (Rise, Fall)			300	ns
Repetition Rate	DC	5	300**	KHz
Resolution		Continuous		dB
Optical Power		300	5000***	mW
Operating Temperature		-5 ~ 75		°C
Storage Temperature		-40 ~ 85		°C
Input Fiber Type		SMF-28		
Output Fiber Type		Panda PM		
Driver Power Consumption			1.5	W
Package Dimension		see drawing		

\* Driver kit is recommended

\*\* Special circuit

\*\*\* Special order

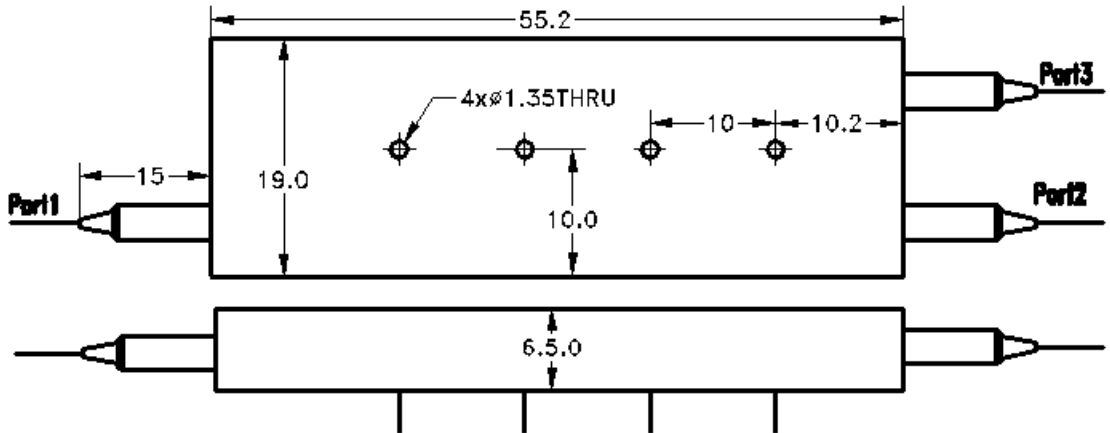
1. Excluding connectors.

## Applications

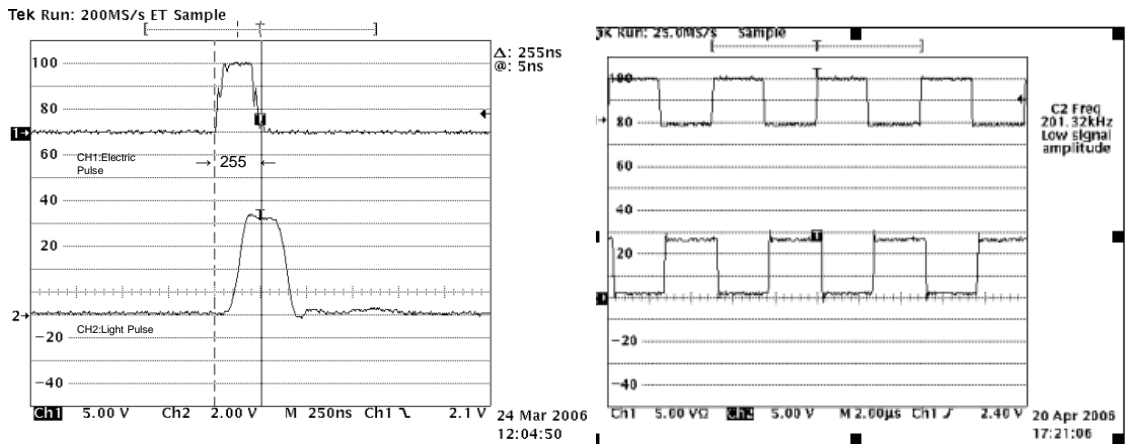
- Power Control
- Power Regulation
- Power Balance
- Instrumentation

# NanoSpeed™ Dual VOA + PM Splitter

## Mechanical Footprint Dimensions (Unit:mm)



## Speed and Repetition Measurement



## Ordering Information

NVOA-	52	<input type="checkbox"/>	<input type="checkbox"/>	1	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Type	Wavelength	State	Package	Fiber Type	Fiber Length	Connector		
	1060=1 L Band=2 1310=3 1410=4 1550=5 650=6 780=7 850=8 Special=0	Normally transparent=1 Normally opaque=2		SMF-2 =1 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		