



# NanoSpeed<sup>TM</sup> High Power 1x2 Variable Fiberoptic Splitter

(Protected by U.S. patents 7,403,677B1; 6,757,101B2; and pending patents)

#### **Product Description**

The NS 1x2 Solid-State Variable Fiber Optic Splitter splits an incoming optical signal among two output optical fibers with an electrically variable power ratio. This is achieved using a patent pending non-mechanical configuration. When the electrical control signal is removed, the splitter latches to a pre-determined ratio with a standard version of 100:0. The device is bidirectional, transmitting light in both direction simultaneously.

The all-solid-state crystal design eliminates the need for mechanical movement and organic materials. The NS Fiber Optic Splitter is designed to meet the most demanding switching requirements of ultra-high reliability, fast response time, and continuous **operation**.



### Performance Specifications

NS 1x2 Split	tter		Min	Typical	Max	Unit
Central Wavelength			850	-	2000	nm
Insertion Loss <sup>[1]</sup> 1260~1650nm 950~1100nm 850~950nm			0.6	1	dB	
		950~1100nm		0.8	1.3	dB
		850~950nm		1	1.5	dB
Cross Talk at 100% splitter		20	25	35	dB	
Splitting (	Output 1			100~0	%	
	Output 2			0~100	%	
[-	Type		Continuous ratio			
Response Time (Rise, Fall)			80		1000	ns
Repetition Rate [2]			DC	20	100	kHz
PDL (SMF version only)				0.1	0.35	dB
IL Temperature Dependency				0.25	0.5	dB
PMD (SMF version only)				0.1	0.2	ps
Return Loss			45	50	60	dB
Operating Temperature			-5		70	°C
Optical Power Handling [3]					5	W
Storage Temperature			-40		85	°C
[1] Evaluding on		_			_	

- [1] Excluding connectors.
- [2] Standard driver. High repetition rate up to 100 KHz is available with special circuit, please call us.
- [3] Defined at 1310/1550nm. For the shorter wavelength, the handling power may be reduced.

#### **Features**

- · Solid-State High Speed
- · Ultra-High Reliability
- Low Insertion Loss
- Compact

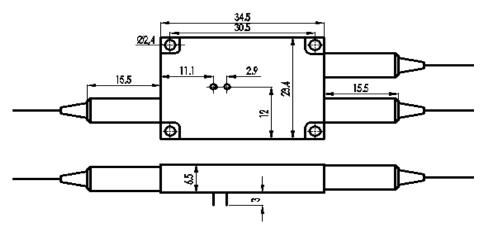
#### **Applications**

- · Optical Channel Blocking
- System Monitoring
- Instrumentation



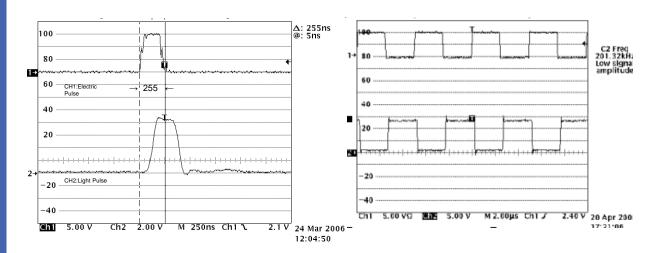
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### Mechanical Dimensions (mm)



\*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

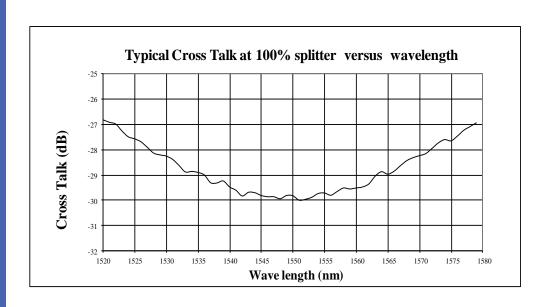
#### **Speed and Repetition Measurement**





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## Bandwidth Measurement



### **Ordering Information**

NHSW-	3 0		1	1				
	Type Wavelength		Configuration	Package	Fiber Type		Fiber Length	Connector
	Splitter=30	1060nm=1 L Band=2 1310nm =3 1550nm =5 850nm=8 980nm=9 Special = 0			SMF-28 = 1 HI1060 = 2 HI780 = 3 PM1550= 5 PM980 = 9 Special=0 =0	Bare fiber=1 900um loose tube=3 Special=0	0.5m=2 1.0 m=3	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC/PC=7 LC Duplex=8 LC/APC=9 Special=0