

# 1x2 Broadband Fiberoptic Switch (Bidirectional)

(Protected by U.S. patent 6823102 and pending patents)

## Product Description

This family of mechanical fiberoptic switches offers the unique feature of an ultra-broad spectral band operation with a wide range of fiber compatibility. This patent pending device is designed to meet the special need for sensors and data communications. Electronic driver is available for this series of switches. The switch is bidirectional.

## Features

- Broad Spectrum Coverage
- Wide Fiber Choice
- Low Insertion Loss
- Low PDL
- Low Cost

## Performance Specifications

1x2 Mechanical Fiberoptic Switch	Specification	Unit
Operation Wavelength	450 ~ 1620	nm
Maximum Insertion Loss ( $\lambda$ c, 23°C, no connector)	$\leq 0.6$	dB
Wavelength Dependant Loss	$\leq 1$	dB
Temperature Dependant Loss	$\leq 0.25$	dB
Repeatability (for Multi Mode)	$\leq 0.1$	dB
Polarization Dependant Loss	$\leq 0.05$	dB
Polarization Mode Dispersion	$\leq 0.05$	ps
Return Loss (Minimum, Input/Output)	$\geq 50$	dB
Typical Switch Time	30	ms
Driven Current	60 ~ 100	mA
Driven Voltage	~ 4.5	V
Fiber Type: SMF to MMF with core up to 400 $\mu$ m, or Customer specified		
Operating Temperature (Max RH 85%, NC)	-5 ~ +70	°C
Storage Temperature (Max RH 70%, NC)	-40 ~ +85	°C
Optical Power Handling	$\leq 2$	W
Package Dimensions (200 $\mu$ m fiber core) <sup>1</sup>	L40xW18xH12	mm
Note 1: package size is fiber dependent		

## Applications

- Fiber Optic Sensor
- Datacom
- Instrumentation

# 1x2 Broadband Fiberoptic Switch

## Ordering Information

BFSW	1	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Type	Wavelength	Latch	Package	Fiber Type	Fiber Length	Connector			
1x2=12	1310=3 1410=4 1550=5 850 =8 1260-1610= 2 1310 & 1550=9 Special=0	Latch=1 Non-Latch=0	40x18x12=1 Special=0	Corning SMF-28=1 Corning HI 1060=2 Multimode 50/125=5 Multimode 62.5/125=6 Corning HI 780=7 Corning HI 980=9 Special=0	Bare Fiber=1 900um Tube=3 Special=0	0.25m=1 0.5m=2 1.0m=3 Special=0	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC=7 Duplex LC=8 Special=0		