

Features

- Unmatched Low Cost
- Low insertion Loss
- High Channel Isolation
- High Stability, High Reliability
- Epoxy-free on Optical Path
- Latching or Non-latching

Quad 2x2 Bypass Optical Switch



Applications

- Optical Network
- Protection/Restoration
- Optical Singnal Routing
- Configurable Optical Add/Drop
- Transmitter and receiver protection
- Network Test System

Description

The LB Series Quad 2x2 Bypass Fiberoptic switch integrated 4 simultaneously activated 2x2 Bypass switches in a single compact format. The device connects optical channels by redirecting incoming optical signals into selected output fibers. This is achieved using a patented opto-mechanical configuration and activated via an electrical control signal. Latching operation preserves the selected optical path after the drive signal has been removed. The switch has integrated electrical position sensors. This novel design significantly reduces moving part position sensitivity, offering unprecedented high stability as well as an unmatched low cost. The switch is bidirectional.

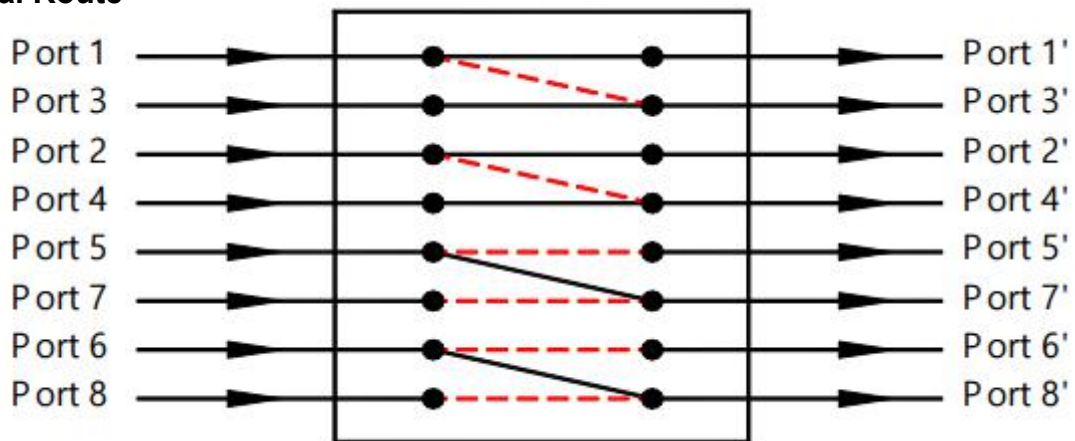
Performance

Parameters	Unit	Specifications
Operating Wavelength	nm	1260~1620(SM)、850(MM)
Insertion Loss	dB	≤1.1
Wavelength Dependent Loss	dB	≤0.30
Polarization Dependent Loss	dB	≤0.10
Temperature Dependent Loss	dB	≤0.25
Return Loss	dB	SM≥50 MM≥30
Cross Talk	dB	SM≥55 MM≥50
Switch Time	ms	≤8
Repeatability	dB	≤±0.02
Durability	times	≥10 ⁷
Operating Voltage	V	5
Switch Type		Non-Latching/Latching
Operating Temperature	°C	-20~+70
Storage Temperature	°C	-40~+85
Optical Power	mW	≤500
Dimension	mm	28L×27W×8.0H

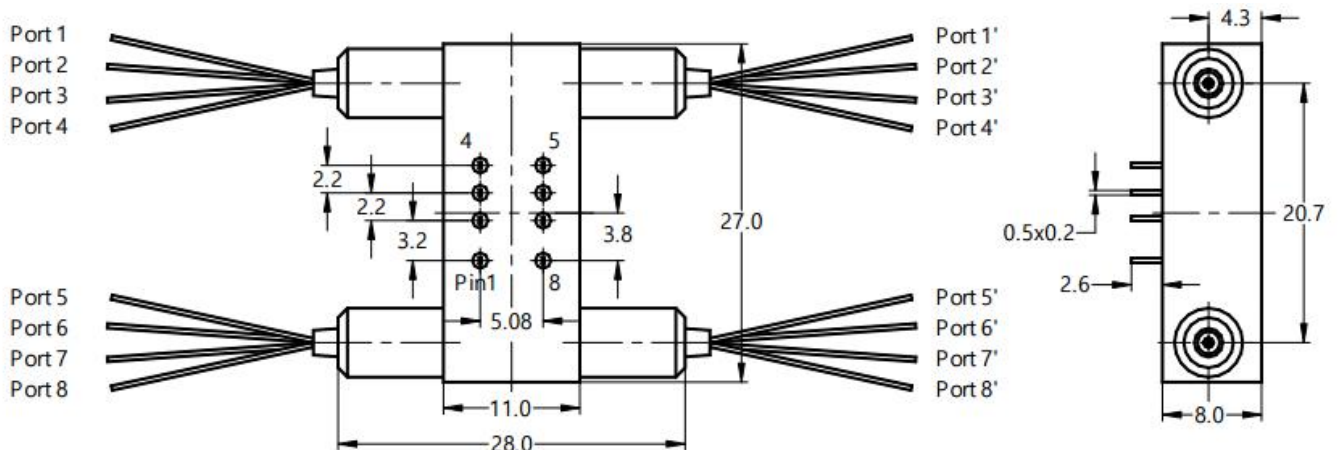
Pins

Type	Pin	Electric Drive		Status Sensor			
		Pin 1	Pin 8	Pin 2-3	Pin 3-4	Pin 5-6	Pin 6-7
Quad 2x2 Bypass		Pin 1	Pin 8	Pin 2-3	Pin 3-4	Pin 5-6	Pin 6-7
	1→1', 2→2' 3→3', 4→4' 5→7', 6→8'	--	V+	Close	Open	Open	Close
Latching	1→3', 2→4' 5→5', 6→6' 7→7', 8→8'	V+	--	Open	Close	Close	Open
	1→1', 2→2' 3→3', 4→4' 5→7', 6→8'	--	--	Close	Open	Open	Close
Non-latching	1→3', 2→4' 5→5', 6→6' 7→7', 8→8'	V+	GND	Open	Close	Close	Open

Optical Route



Dimension



Ordering Information

Mode	Wavelength	Voltage Type	Control Model	Fiber Type	Fiber Diameter	Fiber Length	Connector
S=SM M=MM	85=850nm 13/15=1310/1550 nm X=Others	3=3V 5=5V	L=Latching N=Non-Latching	5=50/125 6=62.5/125 9=9/125 X=Others	25=250um 90=900um 20=2.0mm 30=3.0mm X=Others	1=1m 2=1.5m X=Others	0=None 1=FC/PC 2=FC/APC 3=SC/PC 4=SC/APC 5=ST/PC 6=ST/APC 7=LC/PC 8=LC/APC X=Others