

Features

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

Octo 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 Octo 2x2 Bypass Fiber optic switch integrated 4 dual 2x2 bypass switches in a single compact format. It is designed for 40G/100G transceiver bypass application. 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	≤0.25
Polarization Dependent Loss	dB	≤0.05
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	37.2L×21.5W×13.2H

Pins

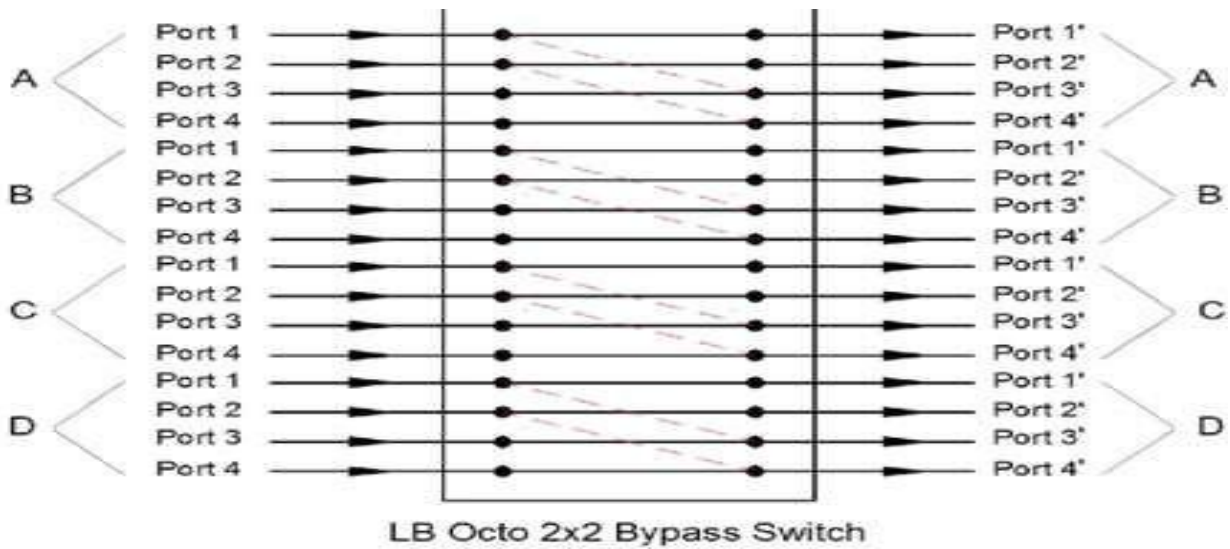
Latching type (For LB Dual 2x2 Bypass MM Switch A, B, C and D)

Optical Path	Electrical Drive		Status Sensor			
	Pin1	Pin8	Pin2-3	Pin3-4	Pin5-6	Pin 6-7
Port 1→ Port 1' Port 2→ Port 2'	5V Pulse	GND	Open	Close	Close	Open
Port 3→ Port 3' Port 4→ Port 4'						
Port 1→ Port 3' Port 2→ Port 4'	GND	5V Pulse	Close	Open	Open	Close

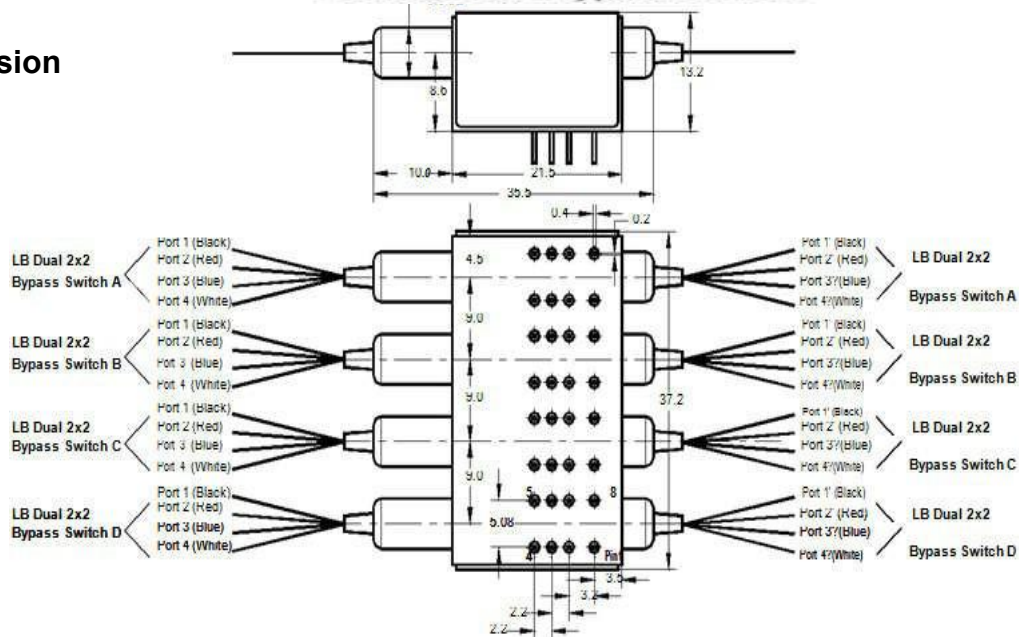
Non-Latching type (For LB Dual 2x2 Bypass MM Switch A, B, C and D)

Optical Path	Electrical Drive		Status Sensor			
	Pin1	Pin8	Pin2-3	Pin3-4	Pin5-6	Pin 6-7
Port 1→ Port 1' Port 2→ Port 2'	5V	GND	Open	Close	Close	Open
Port 3→ Port 3' Port 4→ Port 4'						
Port 1→ Port 3' Port 2→ Port 4'	No Power		Close	Open	Open	Close

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