# LIGHTWAVE LINK INC. 4 THE FUTURE

## **4x4 Bypass Optical Switch**

#### **Product Description**

Lightwave Link Inc. 4x4 bypass optical switch (BOSW) provides channel selection between a pair of input fibers and output fibers. The switch is a compact device suitable for a wide range of applications; for example, optical networking system protection, measurement system, route diversity, reconfigurable add/drop module. The latching mechanism ensures the optical switch status remains in the selected state during power failure. Lightwave Link Inc. 4x4 bypass optical switch fully complies with RoHS Directive 2011/65/EU.



www.lightwavelink.com.tw

#### Features

- Smallest Size
- Low Insertion-Loss
- Fast Switching Speed
- PCB Mountable
- Available in Single Mode / Multi Mode
- RoHS Compliance

**Performance Specification** 

### **Applications**

- Optical network protection and restoration
- Optical network monitoring
- Reconfigurable add/drop multiplexers
- Transmission equipment protection
- Research and development
- Wavelength router

Parameter	9/125 Single Mode			50/125 · 62.5/125 Multi Mode			11.9
	Min.	Тур.	Max.	Min.	Тур.	Max.	Unit
Operating Wavelength Range <sup>1</sup>	1260~1650			810~890, 1260~1340			nm
Insertion Loss <sup>2</sup>		1.0	1.5		1.0	1.5	dB
Return Loss	-50			-30			dB
PDL			0.05			0.05	dB
WDL			0.25			0.25	dB
Crosstalk	-55			-35			dB
Repeatability			±0.02			±0.02	dB
Switching Time <sup>3</sup>			8			8	ms
Absolute Optical Input Power			500			500	mW
Operating Voltage	Latching: 5.0±10% / Non-Latching: 5.0±10%						VDC
Operating Current	Latching: 36~44 / Non-Latching: 26~32						mA
Switching Life Expectancy	>10 <sup>7</sup>			>107			Cycle
Operation Temperature-Normal	-5		70	-5		70	°C
Storage Temperature	-40		85	-40		85	°C
Operation Humidity	5		95	5		95	%RH
Storage Humidity	5		95	5		95	%RH
Dimension	(L)27×(W)12×(H)8.2(±0.2)						mm
Weight	14						g

1. Special wavelength would be upon request.

2. Optical parameters excluded connectors.

3. A minimum  $\geq$ 20ms pulse is recommended for latching type of switch.