# LIGHTWAVE LINK INC. 4 THE FUTURE IS

# **4x4 OPTICAL BYPASS SWITCH**

#### **Product Description**

The 4x4 Optical Bypass Switch utilizes fiber-to-fiber technology over an angled surface to achieve ultra low losses and crosstalk. It is suitable for all bi-directional protection switching applications where premise-side connectivity is not required in the bypass state. Compact and competitive cost, this optical switch provides excellent performance on your network. Lightwave Link 4x4 optical bypass switch fully complies with RoHS Directive 2011/65/EU.



www.lightwavelink.com.tw

#### **Features**

- Compact Format
- Low Return-Loss
- Available in Single Mode / Multi Mode
- PCB Mountable
- Latching Type or Non-Latching Type

## **Applications**

- IPS interface card or external bypass unit
- UTM/ADM
- Optical transmission
- Industrial Ethernet ring switch under power failure or system hang
- Node Bypass Protection

### **Performance Specification**

Parameter	9µm Core Single Mode			50µm or 6	50µm or 62.5µm Core Multi Mode		
	Min.	Тур.	Max.	Min.	Тур.	Max.	Unit
Wavelength Range <sup>1</sup>	1260~1630			850/1300			nm
Straight Insertion Loss <sup>2</sup>			1.0			0.5	dB
Bypass Insertion Loss <sup>2</sup>			2.0			1.0	
Return Loss		-50					dB
PDL			0.1				dB
WDL			0.3				dB
Crosstalk		-80			-80		dB
Repeatability			±0.1			±0.1	dB
Switching Time <sup>3</sup>			5			5	ms
Absolute Optical Input Power			500			500	mW
Operating Current	Latching:40±10% / Non-Latching: 28±10%						mA
Operating Voltage	4.5	5.0	5.5	4.5	5.0	5.5	VDC
Power Consumption	Latching: 200±10% / Non-Latching: 140±10%						mW
Switching Life Expectancy	3x10 <sup>7</sup>			3x10 <sup>7</sup>			Cycle
Operation Temperature-Normal	-5		70	-5		70	°C
Operation Temperature-Special	-20		70	-20		70	°C
Storage Temperature	-40		85	-40		85	°C
Operation Humidity	5		95	5		95	%RH
Storage Humidity	5		95	5		95	%RH
Dimension (H*W*L)	7.6 x 11 x 22.6						mm
Ring Size	Inner ring dimension ≥ 4						cm
Weight <sup>4</sup>	10						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.

4. The product weight excluded optical connectors.