# LIGHTWAVE LINK INC. 4 THE FUTURE



#### **Product Description**

Lightwave Link Inc. 1×9 / 9×1 Fiber Optical Switches optimized for a wide range of fiber-optic applications. Design is based on worldwide telecommunications, data communication, system monitoring and component testing requirements. This 1×9 / 9X1 OSW Module has 1 Input Port, 9 Output Ports or 9 Input Ports, 1 Output port. The Module is controlled by a set of electrical connections. Electrical feedback will be provided by the Module indicating which state the optical switch is in. Lightwave Link Inc. 1×9 / 9×1 OSW Module fully complies with RoHS Directive 2011/65/EU.



www.lightwavelink.com.tw

#### Features

- Compact Size
- Low Insertion-Loss
- Fast Switching Speed
- Built-In position monitoring
- Latching Type available
- RoHS Compliance

### **Performance Specification**

## Applications

- Optical network monitoring
- Optical measurement systems

| Parameter                     | 9µm Core Single Mode |      |      |        |
|-------------------------------|----------------------|------|------|--------|
|                               | Min.                 | Тур. | Max. | Unit   |
| Wavelength Range <sup>1</sup> | 1260~1630            |      |      | nm     |
| Insertion Loss <sup>2</sup>   |                      | 1.5  | 2.0  | dB     |
| Insertion Loss variation      |                      |      | 0.8  | dB     |
| Return Loss                   |                      | -50  |      | dB     |
| PDL                           |                      |      | 0.1  | dB     |
| WDL                           |                      |      | 0.3  | dB     |
| Crosstalk                     |                      | -80  |      | dB     |
| Directivity / Isolation       |                      |      | -80  | dB     |
| Repeatability                 |                      |      | ±0.1 | dB     |
| Switching Time <sup>3</sup>   |                      |      | 4    | ms     |
| Absolute Optical Input Power  |                      |      | 500  | mW     |
| Supply Voltage                |                      |      | 6.6  | VDC    |
| Supply power                  |                      |      | 1.5  | W      |
| Operating Current             | 260±10%              |      |      | mA     |
| Operating Voltage             | 4.5                  | 5.0  | 5.5  | VDC    |
| Power Consumption             | 1300±10%             |      |      | mW     |
| Switching Life Expectancy     | 3x10 <sup>7</sup>    |      |      | Cycles |
| Operation Temperature-Normal  | -5                   |      | 70   | °C     |
| Operation Temperature-Special | -20                  |      | 70   | °C     |
| Storage Temperature           | -40                  |      | 85   | °C     |
| Operation Humidity            | 5                    |      | 95   | %RH    |
| Storage Humidity              | 5                    |      | 95   | %RH    |
| Dimension (H*W*L)             | 16x110x130           |      |      | mm     |
| Weight <sup>4</sup>           | 270                  |      |      | 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.