## LIGHTWAVE LINK INC.

## 100G LR4 Dual Port Passive Optical Bypass Module (LC TYPE)

## Product Description

Lightwave Link Inc. 100G Passive Optical Bypass Module LC type with R15 Corning ${ }^{\circledR}$ ClearCurve ${ }^{\circledR}$ XB or equivalent Optical Fiber is designed for use in QSFP28/QSFP28+ or SFP28 Small Form-factor of fiber-optic Transceiver applications. Design is based on worldwide telecommunications, data communication, system monitoring and component testing requirements. 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. The optical switch module must be actuated to select or change between two states. As a result, it consumes low electric energy to operate the optical switch module. Lightwave Link Inc. 100G LR4 SM optical switch module fully complies with RoHS Directive 2011/65/EU.


## Features

- Smallest Size
- Low Insertion-Loss
- Module Mountable
- Available in Single Mode LC type
- RoHS Compliance


## Applications

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


## Performance Specification

| Parameter | $9 \mu \mathrm{~m}$ Core Single Mode |  |  | Unit |
| :---: | :---: | :---: | :---: | :---: |
|  | Min. | Typ. | Max. |  |
| Wavelength Range ${ }^{1}$ | 1260~1630 |  |  | nm |
| Normal Mode Insertion Loss ${ }^{2}$ | 2.0 |  | 3.0 | dB |
| Bypass Mode Insertion Loss ${ }^{2}$ | 2.5 |  | 4.0 |  |
| Return Loss | -50 |  | -55 | dB |
| PDL |  |  | 0.3 | dB |
| WDL |  |  | 0.3 | dB |
| Crosstalk |  | -80 |  | dB |
| Repeatability |  |  | $\pm 0.1$ | dB |
| Switching Time ${ }^{3}$ |  |  | 7.0 | ms |
| Absolute Optical Input Power |  |  | 500 | mW |
| Operating Voltage (Latch type Relay) | 4.5 | 5.0 | 5.5 | VDC |
| Operation Current(Latch type Relay) |  |  | 200 | mA |
| Power Consumption(Latch type Relay) |  |  | 1.1 | W |
| Switching Life Expectancy | $3 \times 10^{7}$ |  |  | Cycles |
| Operation Temperature-Normal | -5 |  | 70 | ${ }^{\circ} \mathrm{C}$ |
| Operation Temperature-Special | -20 |  | 70 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature | -40 |  | 85 | ${ }^{\circ} \mathrm{C}$ |
| Operation Humidity | 5 |  | 95 | \%RH |
| Storage Humidity | 5 |  | 95 | \%RH |
| Dimension ( $\mathrm{H}^{*} \mathrm{~W}$ * L ) |  | $\times 68 \times$ |  | mm |
| Weight ${ }^{4}$ |  | 500 |  | g |

NOTE:

1. Special wavelength would be upon request.
2. Optical parameters excluded connectors.
3. A minimum $\geqq 20 \mathrm{~ms}$ pulse is recommended for latching type of switch.
4. The product weight excluded optical connectors.
