

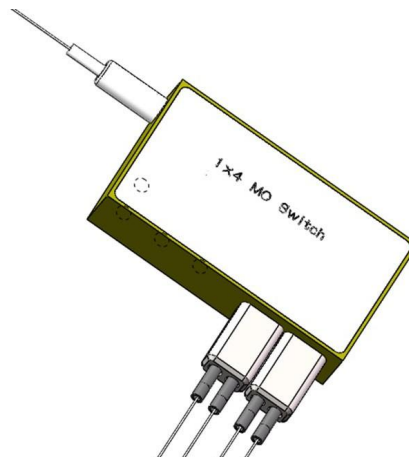


## Features

- Low insertion loss
- Compact structure
- US class switching speed
- Ultra-low power consumption

## Application

- Passive optical network
- Optical protection system
- Measurement system
- Network monitoring



## Technical parameters

| Item                         | Unit   | Parameters                                          |                         | Notes |
|------------------------------|--------|-----------------------------------------------------|-------------------------|-------|
|                              |        | A one-way                                           | Two-way.                |       |
| Wavelength range             | nm     | 1525 ~ 1565                                         |                         |       |
| Insertion loss               | dB     | 1.2 (Typ.); 1.7(Max.)                               | 1.4 (Typ.); 2.0(Max.)   |       |
| Polarization dependent loss  | dB     | 0.15 (Typ.); 0.25(Max.)                             | 0.15 (Typ.); 0.30(Max.) |       |
| Return loss                  | dB     | ≥40 (Typ.50)                                        | ≥35 (Typ.50)            |       |
| Crosstalk                    | dB     | ≥40 (Typ.50)                                        | ≥35 (Typ.50)            |       |
| Polarization mode dispersion | ps     | 0.2                                                 |                         |       |
| Repetitive                   | dB     | +/- 0.01                                            |                         |       |
| Persistent                   | cycles | Regular (>100Billions) ; Ultra-fast (>1000Billions) |                         |       |
| Switching speed              | μs     | Regular (50~200); Ultra-fast (2~20)                 |                         |       |
| Working temperature          | °C     | -5 ~ 70                                             |                         |       |
| Storage temperature          | °C     | -40 ~ 85                                            |                         |       |
| Light power                  | mW     | 500                                                 |                         |       |
| Size ( L×W×H )               | mm     | 37×21×7.5                                           |                         |       |

\*. Wear of all specifications does not include wear of connectors and does not include wear under special conditions.



## Driver pin definition

A one-way

| Pin No.   | Pin1 | Pin2 | Pin3 | Pin4 | Pin5 | Pin6 | Pin7 | Pin8 |
|-----------|------|------|------|------|------|------|------|------|
| IN → OUT1 | +    | —    | +    | —    | —    | +    | +    | —    |
| IN → OUT2 | —    | +    | —    | +    | —    | +    | +    | —    |
| IN → OUT3 | +    | —    | —    | +    | +    | —    | —    | +    |
| IN → OUT4 | —    | +    | +    | —    | +    | —    | —    | +    |

Two-way.

| Pin No.   | Pin1 | Pin2 | Pin3 | Pin4 | Pin5 | Pin6 | Pin7 | Pin8 |
|-----------|------|------|------|------|------|------|------|------|
| IN ↔ OUT1 | +    | —    | +    | —    | —    | +    | +    | —    |
| IN ↔ OUT2 | —    | +    | —    | +    | —    | +    | +    | —    |
| IN ↔ OUT3 | +    | —    | —    | +    | +    | —    | —    | +    |
| IN ↔ OUT4 | —    | +    | +    | —    | +    | —    | —    | +    |

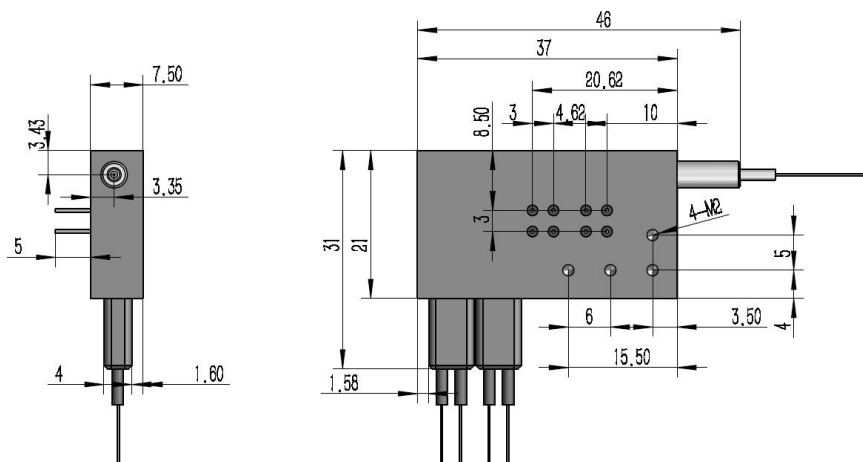
## Electronic control parameters

| Parameters              | Specifications           |               | Unit |
|-------------------------|--------------------------|---------------|------|
|                         | Regular                  | Ultra-fast    |      |
| Switching Speed         | 50~200                   | 2~20 (Typ.5)  | μs   |
| Switching Voltage (VCC) | 3(+/-5%)                 | 3-7.5         | V    |
| Switching Current       | < 100                    | < 350         | mA   |
| Driving Mode            | Voltage or Pulse Driving | Pulse Driving | NA   |
| Pulse Width (typical)   | 300(Typ.); 500(Max.)     | 10            | μs   |
| Claim Frequency         | <1000                    | < 3500        | Hz   |

Note: excess of this driving voltage may damage the device.



**Overall dimensions (mm)**



**Order information HC - MOS-1×4ZT -A-B-C-D-E-F**

| A                          | B                                     | C                                 | D                                             | E                                                 | F                                                                                                        |
|----------------------------|---------------------------------------|-----------------------------------|-----------------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Working mode               | Switching speed                       | Working wavelength                | Optical fiber type                            | Fiber length                                      | Connection header type                                                                                   |
| 1. A one-way<br>2. two-way | 1. 50~200us<br>2. 2~20us<br>3. Others | 1. CBand1525~1565 nm<br>2. Others | 1. 250μm fiber<br>2. 900μm fiber<br>3. Others | 1. 0.5 +/- 0.1 m<br>2. 1.0 +/- 0.1 m<br>3. Others | 0. No Connector<br>1. FC/UPC<br>2. FC/APC<br>3. SC/UPC<br>4. SC/APC<br>5. LC/PC<br>6. MU/PC<br>7. Others |