



MEMS 2x2/3x3/4x4 Optical Switch

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■ Features

- > Compact Size
- > Fast Switching Time
- > Low IL, Good Repeatability
- > High Reliability and stability

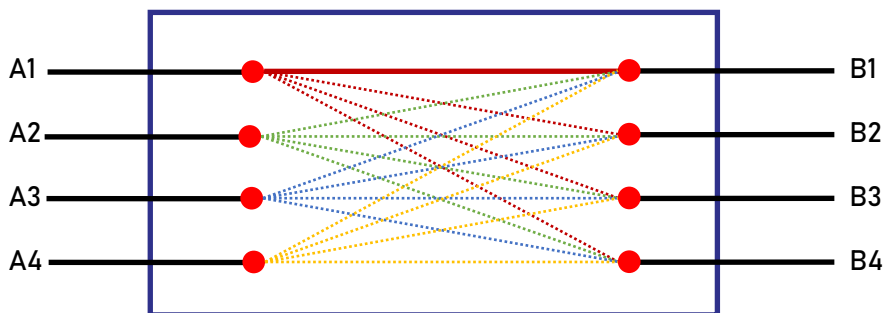
■ Application

- > MAN
- > Data Center
- > Fiber Sensing and Monitoring
- > Instrumentation

■ Compliance

- > Telcordia GR-1221
- > Telcordia GR-1073

■ Optical Route



Note: Only one A port can be selected at a time, corresponding to one B port.

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Specifications (Single Mode)

| Parameters | | Unit | MFSW N×N-SM (N≤4) | | |
|---------------------|------------------|-------|---|-----|------|
| Working Wavelength | | nm | O band: 1290~1330 C band: 1530~1570 L band: 1570~1610 L+ band: 1625~1650 | | |
| Testing Wavelength | | nm | 1310/1550/1625/1650 | | |
| Insertion Loss | | | 2×2 | 3×3 | 4×4 |
| | @CWL Single-band | dB | ≤0.8 | | ≤1.2 |
| | @CWL Dual-band | | ≤1.0 | | ≤1.4 |
| WDL | | dB | ≤0.3 | | |
| TDL | | dB | ≤0.4 | | |
| PDL | | dB | ≤0.2 | | |
| Return Loss | | dB | ≥50 | | |
| Crosstalk | | dB | ≥50 | | |
| Repeatability | | dB | ≤±0.05 | | |
| Switching Time | | ms | ≤8 | | |
| Durability | | times | ≥10 ⁹ | | |
| Operating Voltage | | V | 60 | | |
| Switching Mode | | | Non-Latching | | |
| Input Optical Power | | mW | ≤500 | | |
| Operating Temp. | | °C | -20 ~ +85 | | |
| Storage Temp. | | °C | -40 ~ +85 | | |
| Operating Humidity | | % | 5 ~ 95 | | |
| Dimension | | mm | Φ5.5×42(±0.1) | | |

1. Within operating temperature and all SOP.
2. Excluding connector.
3. WDL is measured in a ±20nm range at 23°C.

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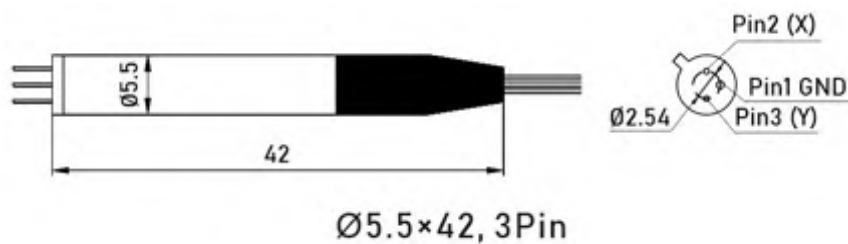
Specifications (Multi-Mode)

| Parameters | | Unit | MFSW N×N-MM (N≤3) | |
|---------------------|--------------|-------|-------------------|------|
| Working Wavelength | | nm | 850±30, 1310±30 | |
| Testing Wavelength | | nm | 850/1310 | |
| Insertion Loss | | | 2×2 | 3×3 |
| | @850 or 1310 | dB | ≤0.8 | ≤1.0 |
| | @850 &1310 | | ≤1.0 | ≤1.2 |
| WDL | | dB | ≤0.3 | |
| TDL | | dB | ≤0.4 | |
| PDL | | dB | ≤0.2 | |
| Return Loss | | dB | ≥30 | |
| Crosstalk | | dB | ≥30 | |
| Repeatability | | dB | ≤±0.05 | |
| Switching Time | | ms | ≤8 | |
| Durability | | times | ≥10 ⁹ | |
| Operating Voltage | | V | 60 | |
| Switching Mode | | | Non-Latching | |
| Input Optical Power | | mW | ≤500 | |
| Operating Temp. | | °C | -20 ~ +85 | |
| Storage Temp. | | °C | -40 ~ +85 | |
| Operating Humidity | | % | 5 ~ 95 | |
| Dimension | | mm | Φ5.5×42(±0.1) | |

1. Within operating temperature and all SOP.
2. Excluding connector.
3. WDL is measured in a ±20nm range at 23°C.

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■ Dimension



■ Ordering Information: MFSW N×N-A-B-C-D

| A | |
|------|------------|
| Code | Wavelength |
| C | C band |
| L | L band |
| O | O band |
| O&C | O&C band |
| C&L | C&L band |
| X | other |

| B | |
|------|---------------------|
| Code | Fiber Type |
| SM | Single Mode |
| M1 | Multi-Mode 50/125 |
| M2 | Multi-Mode 62.5/125 |
| X | other |

| C | |
|------|-----------------------------|
| Code | Fiber Dimension |
| 25 | $\varnothing 0.25\text{mm}$ |
| X | other |

| D | |
|------|--------------|
| Code | Fiber Length |
| 05 | 0.5m |
| 10 | 1.0m |
| 15 | 1.5m |
| X | other |