

## 0506 Electro-mechanical Switch

Q1001-S



### 2x2 SN Type Fiber Switch-1550 nm

There are two drive coils inside the switch which are used individually to set the switch in each of the two possible optical states to change the state of the switch, apply a 5 VDC drive pulse of approximately 20 m sec or longer on the electrical drive pins as indicated in the table below. Once the switch has been moved to the new position it will remain there until a drive pulse appears on the drive coil for the other path. Typical operating current is 40 mA during switching.

There are two sets of single pole double throw contacts which are also operated by the switch. These can be used to sense the position of the switch or to operate other circuits based on the switch path chosen.

#### Insertion Loss @ 5 V DC

Optical Path	Insertion Loss @ 1300 nm	Insertion Loss @ 1550 nm
1-3	0.50 dB	0.51 dB
1-2	0.56 dB	0.69 dB
4-2	0.72 dB	0.56 dB
4-3	0.54 dB	0.56 dB

Note: Includes the loss of one connector in connectorized versions.

#### Return Loss @ 5 V DC

Optical Path	Return Loss @ 1300 nm	Return Loss @ 1550 nm
1-3	60 dB	61 dB
1-2	61 dB	60 dB
4-2	62 dB	60 dB
4-3	62 dB	62 dB

Note: Excluding connectors.

#### Insertion Loss @ 5 V DC (Biadirectional)

Optical Path	Insertion Loss @ 1300 nm	Insertion Loss @ 1550 nm
3-1	0.50 dB	0.51 dB
3-4	0.54 dB	0.56 dB
2-1	0.56 dB	0.69 dB
2-4	0.72 dB	0.56 dB

Note: Includes the loss of one connector in connectorized versions.

#### Return Loss @ 5 V DC (Biadirectional)

Optical Path	Return Loss @ 1300 nm	Return Loss @ 1550 nm
3-1	60 dB	61 dB
3-4	62 dB	62 dB
2-1	61 dB	60 dB
2-4	62 dB	60 dB

Note: Excluding connectors.

**Order notes to our customers:** The default parameters are as follows. For special needs, please contact sales.

**1) Connector FC/APC, 900 um, 1 m by default for all devices except for high power devices.**

**2) Slow axis working, fast axis blocked, connector key is aligned to slow axis by default for PM devices.**