Product Bulletin



The JDS Uniphase next-generation, all-optical miniature opto-mechanical (MOM) fiberoptic switch is a single-mode component that increases network flexibility. Its hermetic packaging provides high reliability under demanding central office conditions and is GR-1221 qualified.

Collimated beam optics, an epoxy-free optical path, and a specially designed mirror and moving prism mechanism enable excellent performance characteristics. Directly mountable on printed circuit boards, the MOM switch is equipped with status contacts to provide an electrical readout of the switch position.

On request, JDS Uniphase also provides customized modular assemblies that incorporate taps, wavelength division multiplexers (WDMs), splitters, and other components. The MOM switch's unique unilateral input and output fiber configuration is ideal for these assemblies.

Fiberoptic Switch MOM Series

Key Features

- 1x1, 1x2 (2x1) and 2x2 (bypass) in both latching and non-latching configurations
- Hermetic packaging
- Unilateral input/output fiber location
- High durability

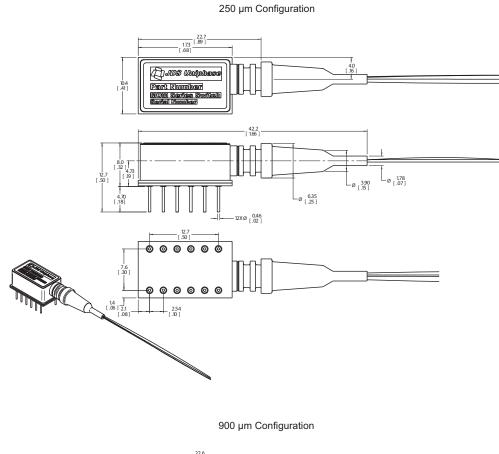
Applications

- Configurable optical add/drop multiplexing
- Protection switching
- Network monitoring

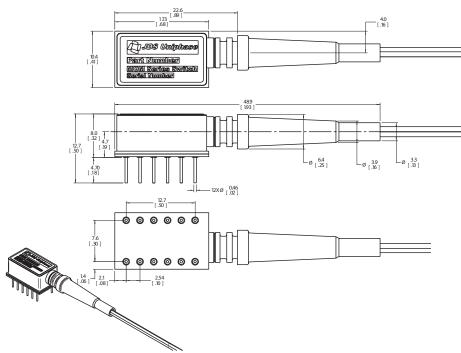
Compliance

• Telcordia GR-1221-CORE and GR-1073-CORE

MOM Series Fiberoptic Switch | 2



Dimensions Diagram (Specifications in mm [inches] unless otherwise noted.)



Common footprint and electrical pinout for both the latching and non-latching versions.

Specifications

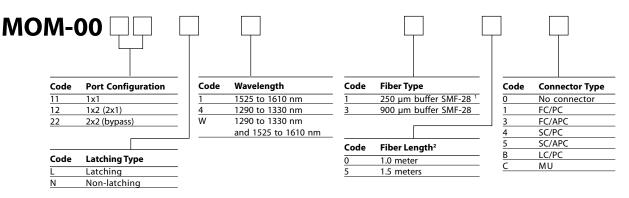
Parameter	Specification
Wavelength range	1290 to 1330 nm and/or 1525 to 1610 nm
Insertion loss ^{1,2}	
1x1, 1x2 (2x1)	<0.5 dB (0.3 dB typical)
2x2 (bypass)	<0.6 dB (0.4 dB typical)
Polarization dependent loss	<0.07 dB (0.03 dB typical)
Crosstalk	>55 dB (65 dB typical)
Return loss ¹	>50 dB (55 dB typical)
Optical input power	<500 mW
Repeatability	<±0.02 dB (cycle to cycle)
Switching time ³	<4 ms (2.5 ms typical)
Switching voltage	5±10% V DC
Maximum switching current	
latching	32 mA
non-latching	46 mA
Switch lifetime ⁴	100 million cycles
Cycle frequency	<10 Hz
Nominal dimensions (L x W x H)	17.3 x 10.4 x 8.0 mm (0.68 x 0.41 x 0.32 inches)
Operating temperature	0 to 70 °C or -5 to 80 °C short term⁵
Humidity	<85% RH, or <90% RH short term ⁵
Storage temperature	-40 to 85 °C
Qualification	Telcordia GR-1221-CORE and GR-1073-CORE

Specified without connectors.
Add an additional 0.3 dB for operation over the specified wavelength range, operating temperature range, and all states of polarization.
The elapsed time between power application and achievement of 90% of steady state value of the new switch.
One switch cycle is defined as one set pulse followed by a reset pulse.
Short term is defined as less than 96 consecutive hours and less than a total of 15 days over a one year period.

Ordering Information

For more information on this or other products and their availability, please contact your local JDS Uniphase account manager or JDS Uniphase directly at 1-800-498-JDSU (5378) in North America and +800-5378-JDSU worldwide or via e-mail at sales@jdsu.com.

Sample: MOM-0012LW350



1. 250 μm buffer SMF-28 fiber is only available with the "no connector" option.

2. Tolerance on fiber length is ±0.1m

SMF-28 is a registered trademark of Corning Incorporated. Telcordia is a registered trademark of Telcordia Technologies Incorporated.



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