JDS Uniphase

Product Bulletin

Fiber Faraday Rotator Mirror

The fiber faraday rotator mirror eliminates polarization fringe fading in fiberoptic Michelson Interferometer Sensors. This is achieved passively and is independent of the inital state of polarization. The product provides low insertion loss, high reverse coupling efficiency, and low return loss.

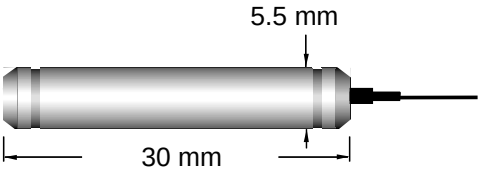
Key Features

- High reflection coefficiency
- High power handling
- Multiple wavelengths available

Applications

- DWDM systems
- Advance optical instrumentation

Package Dimensions



Specifications

Parameter		A Grade
Center wavelength		1310, 1480, 1550, 1590 nm
Spectral width	Minimum	30 nm
Faraday rotation angle (single pass)		45°
Faraday rotation angle tolerance	Maximum	0.5°
Reflection coefficient[1]	Typical	92%
	Minimum	85%
Reflection polarization dependence	Maximum	2%
Return loss from Fiber/GRIN lens interface	Minimum	30 dB
Optical power handling	Maximum	300 mW
Tensile load	Maximum	5 N
Operating temperature		-20 to 60 °C
Storage temperature[2]		-40 to 85 °C

1. Without connectors
2. -20 to 70 °C for 3.0 mm cable

Environmental Tests

Temperature cycling	-40 to 80 °C for 14 days; rate 1 °C/min; dwell 1 hour at extremes
High temperature bake	80 °C for 2,000 hours
Vibration test	3 axes 20 g's at 20 to 2,000 Hz
Shock	3 axes, 100 g's, 11 ms
Maximum tensile load	10 N force for 10 sec.

Ordering Information

Indicate your requirements by selecting one option from each configuration table. Please print the corresponding codes in the available boxes to form your part number. For more information on this or other products and their availability, please contact your JDS Uniphase account manager, or call 1-877-550-JDSU toll free in the U.S. and Canada, or visit www.jdsuniphase.com.

Sample: HSFM10A0S1010

HSFM □ 0 A 0 S □ 0 □ □

Code	Wavelength
1	1560 nm
2	1550 nm[1]
3	1540 nm
4	1480 nm[1]
5	1310 nm[1]
6	1300 nm
L	1590 nm

Code	Model
A	A Grade

Code	Package
S	Standard

Code	Fiber Type
1	250 µm fiber (SMF-28)
3	900 µm loose tube (SMF-28)
4	900 µm tight buffer (SMF-28)[1]

Code	Fiber Length
1	1 meter[1]
2	2 meters
3	3 meters

Code	Connector[2]
0	No connector[1]
1	FC/PC
2	FC/SPC
3	FC/APC
4	SC/SPC
5	SC/APC
9	FC/UPC
A	SC/UPC
B	LC/PC
D	MU

1. Standard product.
2. Insertion loss and return loss depend on connector type.

SMF-28 is a registered trademark of Corning Incorporated.

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