JDS Uniphase

Product Bulletin

1480/1550 nm Polarization-Insensitive Fiber Isolators

JDS Uniphase 1480/1550 nm Polarization-Insensitive Fiber Isolators are specifically designed for erbium doped fiber amplifier (EDFA) applications. They provide stable, reverse isolation at both 1480 and 1550 nm simultaneously. They are insensitive to input light polarization and epoxy-free in the optical path.

Key Features

- Dual window coverage (1480 and 1550 nm)
- High isolation
- Low insertion loss
- Epoxy-free optical path
- Very low insertion loss and isolation stability over temperature and wavelength ranges
- High power handling capability

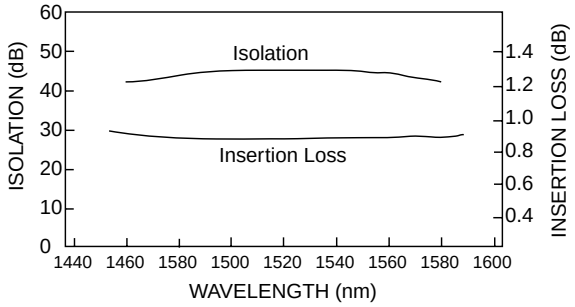
Applications

- Optical fiber amplifiers
- WDM network systems

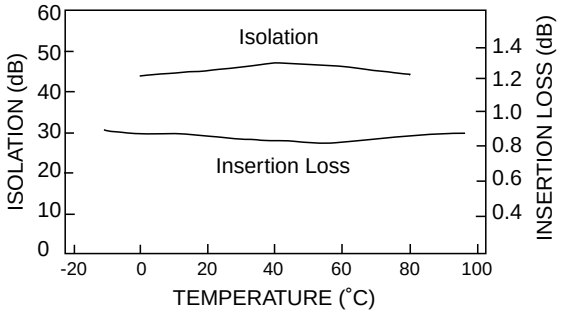
Compliance

- Telcordia 1221

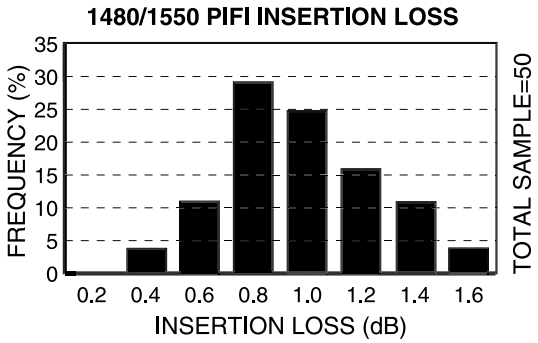
Wavelength Dependence



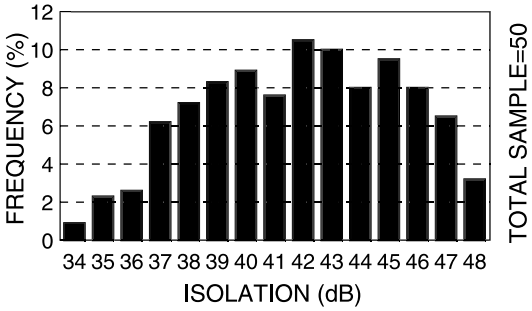
Temperature Dependence



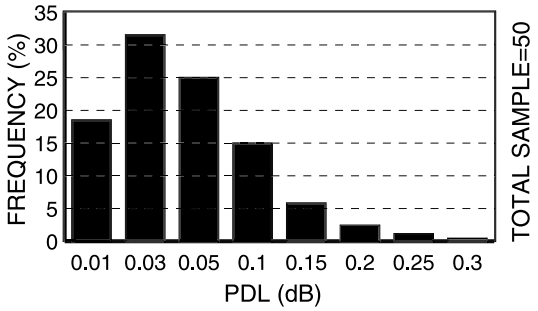
Insertion Loss



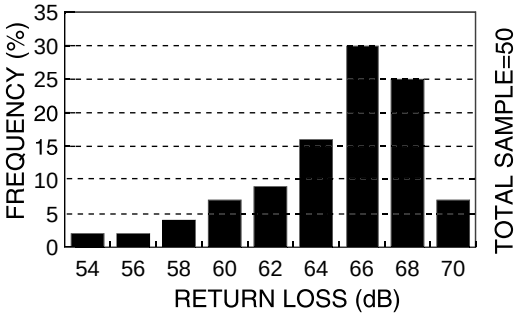
Isolation



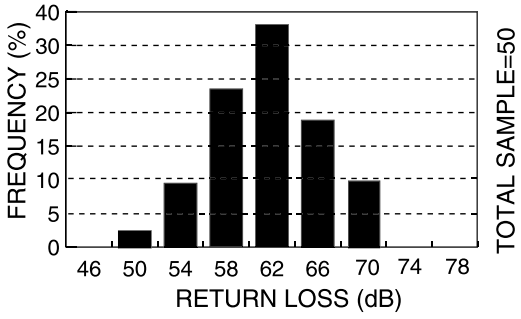
Polarization Dependent Loss



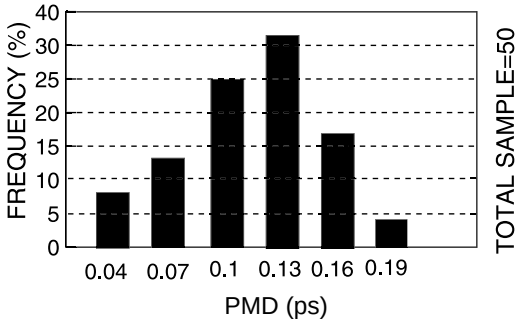
Input Return Loss



Output Return Loss



Polarization Mode Dispersion

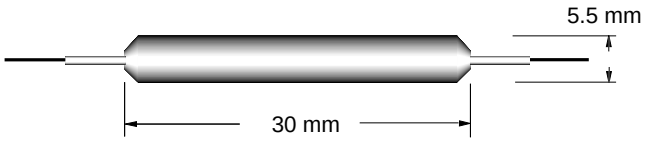


Specifications

Parameter		Premium	Grade A
Peak isolation	Typical	50 dB	45 dB
Isolation (1460 to 1580 nm, 23 °C, all states of polarization)[1]	Minimum	45 dB	40 dB
Isolation (1460 to 1580 nm, 0 to 60 °C, all states of polarization)[1]	Minimum	40 dB	37 dB
Insertion loss (1460 to 1580 nm, 0 to 60 °C, all states of polarization)[2]	Typical	0.6 dB	0.8 dB
	Maximum	0.9 dB	1.2 dB
Return loss (input/output)[2,3]	Minimum	60/50 dB	55/50 dB
Polarization dependent loss (PDL)[3]	Maximum	0.1 dB	0.2 dB
Polarization mode dispersion (PMD)[3]	Maximum	0.05 ps	0.1 ps
Optical power	Maximum	300 mW	300 mW
Tensile load	Maximum	10 N	10 N
Dimensions (D x L)		5.5 x 30 mm	5.5 x 30 mm
Operating temperature		-20 to 60 °C	-20 to 60 °C
Storage temperature		-40 to 85 °C	-40 to 85 °C

1. Isolation over 1460 to 1500 nm is 2 dB lower.
2. Without connectors.
3. Measured at 23 °C.

Package Dimensions



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: PIFIA3AP11100

PIFI [A] [3] [ ] [P] [ ] [ ] [ ] [ ]

Code	Wavelength
A	1480/1550 nm

Code	Package
3	5.5 x 30 mm

Code	Model
P	Premium
A	Grade A[1]

Code	Fiber Type (Input)
1	250 µm fiber (SMF-28)[1]
3	900 µm loose tube (SMF-28)
4	900 µm tight buffer (SMF-28)[1]
6	900 µm fiber (DS)[2]

Code	Fiber Type (Output)
1	250 µm fiber (SMF-28)[1]
3	900 µm loose tube (SMF-28)
4	900 µm tight buffer (SMF-28)[1]
6	900 µm fiber (DS)[2]

Code	Fiber Length
1	1 meter[1]
2	2 meters
3	3 meters
4	0.5 meters
5	1.5 meters
6	2.5 meters

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

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

1. Standard.
2. Insertion loss slightly increases.
3. Insertion loss and return loss depend on connector type.

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U.S. and Canada Toll Free: 877-550-JDSU
www.jdsuniphase.com

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