FWDM Reflector

Features and Benefits

Compact Size
Stability Over Temperature
Flexible Band Arrangement

Standards

RoHS	Free of hazardous substances according to RoHS2011/65/EU
Design and Test Criteria	Product is qualified to Telcordia GR-1209-CORE and GR-1221-CORE

Corning's miniature FWDM retro-reflector is used to reflect the desired optical signal back into the COM port, while the rest of signals are guided into the output port. It is a low cost, two-port micro optical device with excellent performance including low insertion loss, high isolation, high return loss, and low PDL. In the typical application of network monitoring, the retro-reflected signal will have significantly lower insertion loss than the monitor compared to the configuration without the reflector unit.

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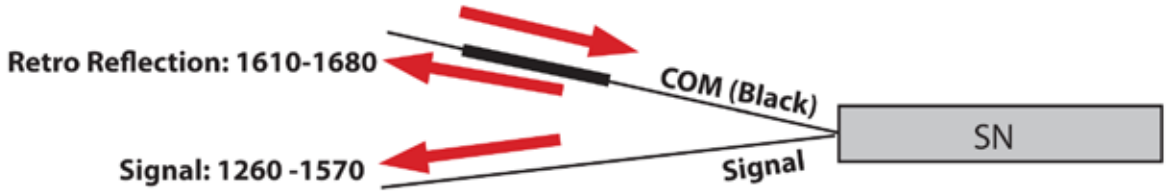
Specifications

Parameters	Maximum
Signal Channel Bandwidth*	1260-1570 nm
Retro Reflection Channel Bandwidth	1610-1680 nm
Maximum Signal Channel Insertion Loss	0.60 dB
Maximum Retro Reflection Channel Return Loss	1.00 dB
Minimum Signal Channel Isolation	15 dB
Minimum Retro Reflection Channel Isolation	40 dB
Minimum Return Loss for Reflect Band on COM and Signal Port	45 dB
Maximum PDL	0.20 dB
Operating Temperature Range**	-5°C to +65°C

Notes:

** Other wavelength arrangement available per customer request.*
*** All Performances met specifications over operation temperature range. Data shown are at room temperature without connectors.*

Drawing



Shipping Package
Packaging Dimensions
Compact Size: 3.5 x 15.0 mm

FWDM Reflector

Ordering Information

FWDM Reflector

6 6 0 - □ 2 2 □ - □ □ □ □ □

1 2 3 4 5

1 Select Wavelength Range
P: 1610-1680 nm Retro-Reflected
Other: Customer Specified

2 Select Pigtail Type
U: 250 µm Bare Fiber
1: 900 µm Tube

3 Select Grade
1: Standard
2: Premium
3: Ultra

4 Select Connector**
0: None
K: LC/APC
L: LC/PC
P: FC/PC
Q: FC/APC
S: SC/PC
T: SC/APC
U: MU/PC

5 Select Customization
000: Standard or
Running number used for special types or custom made

Note:

*** All Performances met specifications over operation temperature range. Data shown are at room temperature without connectors.*

These part numbers are specific to Corning Optical Communications OEM Solutions Business Unit. Please contact OEM sales at +1-408-736-6900 or oemsales@corning.com and visit www.corning.com/opcomm/oem for sales support.

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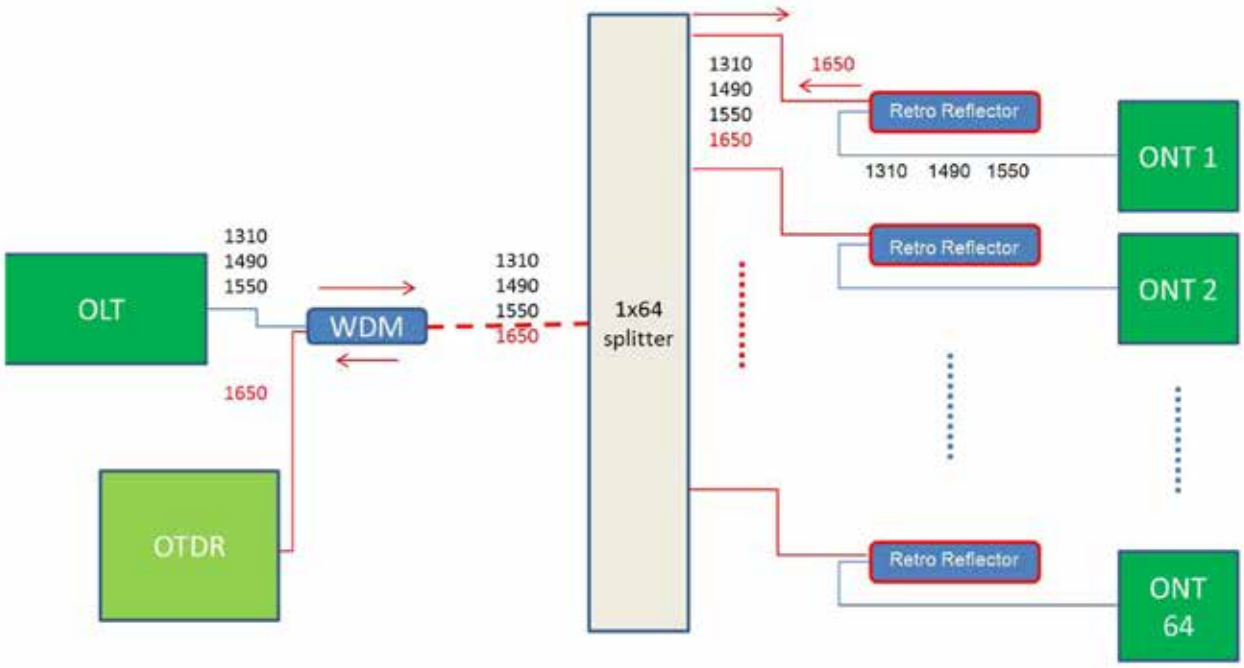
Application Notes

Corning's FWDM retro-reflector can be used to enhance the Optical Network monitoring with great felxibiity and minimum cost. A typical application scheme to implement the reflector in next generation FTTx PON is illustrated in the schematic drawing below.



Using this product, the returned 1650 nm testing signal will have significantly lower insertion loss to the OTDR (Optical Time Domain Reflectometer), compared to the configuration without a reflector unit. It can be implemented in the FTTx network in front of each final user (ONTs), which requires minimum effort to update the network infrastructure for existing network and to construct new FTTx PON. With comparison to other reflector products in the market, Corning's retro-reflector uses same-side fiber arrangement, offers lower insertion loss for the 1310, 1490, and 1550 transmissions, and provides a more compact form factor.

RoHS COMPLIANT

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