Fixed Attenuators

Features and Benefits

- Standard Fixed Attenuation Values of 1 dB up to 30 dB
- Precision Polishing for Reduced Back Reflection
- Available in a Variety of Connector Types
- Polarization Insensitive

Standards

<table>
<thead>
<tr>
<th>RoHS</th>
<th>Free of hazardous substances according to RoHS2011/65/EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design and Test Criteria</td>
<td>Product is qualified to Telcordia GR-910-CORE</td>
</tr>
</tbody>
</table>

Corning offers a complete line of high-performance fiber fixed in-line attenuators, patch coupling attenuators, tube-type attenuators, and loopback attenuators for a wide variety of applications. The 754 Series features extremely low return loss and durable polymer body design. Our attenuators use all fiber attenuation mechanism ensuring the devices are wavelength and polarization insensitive. Corning attenuators feature ruggedized packaging, compact housings, and a completely enclosed fiber system to ensure repeatable performance without concern for damage.
Fixed Attenuators

Specifications

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attenuation Tolerance</td>
<td>0-5 dB: ± 0.5 dB; &gt; 5 dB: ± 10% of dB Value</td>
</tr>
<tr>
<td>Operational Wavelengths</td>
<td>1310 nm; 1550 nm; 1310 nm and 1550 nm (± 10 nm)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C to +75°C</td>
</tr>
</tbody>
</table>

Ordering Information

Singlemode Fixed In-Line Attenuators / 754 Series

1. Select Attenuation Value
   - 01: 1 dB
   - 02: 2 dB
   - 03: 3 dB
   - 05: 5 dB
   - 10: 10 dB
   - 15: 15 dB
   - 20: 20 dB

2. Select Return Loss (Per Connector)
   - 3: -45 dB Min.
   - 4: -50 dB Min.
   - 5: -55 dB Min.
   - 6: APC

3. Select Connector
   - B: ST Metal Body
   - L: LC/PC
   - K: LC/APC
   - P: FC/PC
   - Q: FC/APC
   - S: SC/PC
   - T: SC/APC
   - U: MU/PC
   - W: Slim MU/PC

   E = Wavelength 1310 nm & 1550 nm

4. Select Customization
   - 00: Standard
   - 01: Short Type (LC Only)

Singlemode Fixed Patch Coupling Attenuators / 754 Series

1. Select Attenuation Value
   - 00: 0 dB
   - 01: 1 dB
   - 02: 2 dB
   - 03: 3 dB
   - 05: 5 dB
   - 10: 10 dB
   - 15: 15 dB
   - 20: 20 dB

2. Select Return Loss (Per Connector)
   - 3: -45 dB Min.
   - 4: -50 dB Min.
   - 5: -55 dB Min.
   - 6: APC

3. Select Connector* (Male-Female)
   - 1: FC-SC Flange
   - 2: FC-SC Square
   - 3: ST-SC Flange
   - 4: SC-ST
   - 5: SC-FC
   - 6: SC-LC
   - 8: SC-MU
   - 9: LC-MU

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.
Fixed Attenuators

Specifications

SINGLEMODE FIXED TUBE TYPE ATTENUATORS / 754 SERIES

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attenuation Tolerance</td>
<td>0-5 dB: ± 0.5 dB; &gt; 5 dB: ± 10% of dB Value</td>
</tr>
<tr>
<td>Operational Wavelengths</td>
<td>Standard: 1310 nm; 1550 (± 10 nm)</td>
</tr>
<tr>
<td></td>
<td>Wideband: 1310 nm; 1550 nm (± 40 nm)</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C to +75°C</td>
</tr>
</tbody>
</table>

Ordering Information

Singlemode Fixed Tube Attenuators / 754 Series

Select Package Types
1: 250 mm, Tube
2: 900 mm, Tube
3: 900 mm, Ruggedized
4: 1.6 mm, Ruggedized
5: 3 mm, Ruggedized

Select Attenuation Value
01: 1 dB
05: 5 dB
10: 10 dB
15: 15 dB
20: 20 dB

Select Return Loss
3: - 45 dB Min.
4: - 50 dB Min.
5: - 55 dB Min.
6: APC

Select Connector
0: None
B: ST Metal
L: LC/PC
K: LC/APC
P: FC/PC
Q: FC/APC
S: SC/PC
T: SC/APC
U: MU/PC

Select Wavelength
A: 1310 nm ± 10 nm
B: 1310 nm ± 40 nm
C: 1550 nm ± 10 nm
D: 1550 nm ± 40 nm
E: 1310 nm & 1550 nm ± 40 nm

Select Total Length (Use Decimeter)
05: 0.5 Meter
10: 1 Meter
99: 9.9 Meter

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# Fixed Attenuators

## Specifications

### FIXED LOOPBACK ATTENUATORS / 754 SERIES

<table>
<thead>
<tr>
<th>Parameters</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Attenuation Tolerance</td>
<td>2 - 9 dB: ± 1 dB; 10 - 15 dB ± 1.5 dB; &gt; 15 dB ± 2 dB</td>
</tr>
<tr>
<td>Operational Wavelengths</td>
<td>850 nm ± 10 nm; 1310 nm ± 10 nm</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-40°C to +75°C</td>
</tr>
</tbody>
</table>

## Ordering Information

**Fixed Loopback Attenuators / 754 Series**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select Fiber Type</td>
<td>Select Attenuation Value</td>
<td>Select Return Loss</td>
<td>Select Connector</td>
<td>Select LC Loopback</td>
</tr>
<tr>
<td>1: SM¹</td>
<td>02: 2 dB</td>
<td>3: -45 dB Min.</td>
<td>5: 12F MPO Female (MM)</td>
<td>000: Cable Type</td>
</tr>
<tr>
<td>2: MM, 62.5 mm¹</td>
<td>05: 5 dB</td>
<td>4: -50 dB Min.</td>
<td>6: LC/APC</td>
<td>101: Black Shell Cover (50 mm)</td>
</tr>
<tr>
<td>3: MM, 50 mm¹</td>
<td>10: 10 dB</td>
<td>5: -55 dB Min.</td>
<td>K: MT-RJ (w/o Pin)</td>
<td>301: Green Back Shell Cover (APC)</td>
</tr>
<tr>
<td></td>
<td>15: 15 dB</td>
<td></td>
<td>L: SC/PC</td>
<td>501: Blue Back Shell Cover (SM)</td>
</tr>
<tr>
<td></td>
<td>20: 20 dB</td>
<td></td>
<td>M: MT-RJ (w/Pin)</td>
<td>701: Beige Back Shell Cover (62.5 mm)</td>
</tr>
<tr>
<td></td>
<td>25: 25 dB</td>
<td></td>
<td>N: SC/PC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>30: 30 dB</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Select MT-RJ Loopback**

100: Vertical Version

200: Horizontal Version

**Select SC Loopback**

100: Black Back Shell Cover -Std.

200: Yellow Back Shell Cover

600: Orange Back Shell Cover

N00: Other Color

**SC Low Loss Loopback Attenuator**

1. 754-S100-5S100, SM, IL ≤ 1.2 dB
2. 754-S200-05100, 62.5 mm, IL ≤ 0.6 dB
3. 754-S300-05100, 50 mm, IL ≤ 0.8 dB

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### Notes:

1. MM loopback attenuators are only available for 2 dB only, 850/1310 nm
2. SM Wavelength is 1310 nm only

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Ordering Information

Fixed Loopback Attenuators / 754 Series - BIF (SM Only)

7 5 4 - 7 [1] [2] [3] [4] [5]

1. Select Fiber Type
   1: SM

2. Select Attenuation Value
   02: 2 dB
   05: 5 dB
   10: 10 dB
   15: 15 dB
   20: 20 dB
   25: 25 dB
   30: 30 dB

3. Select Return Loss
   3: - 45 dB Min.
   4: - 50 dB Min.
   5: - 55 dB Min.
   6: APC

4. Select Connector
   K: LC/APC
   M: MT-RJ (w/o Pin)
   S: SC/PC
   L: LC/PC
   N: MT-RJ (w/Pin)
   T: SC/APC

5. Select LC Loopback
   000: Cable Type
   301: Green Back Shell Cover (APC)
   501: Blue Back Shell Cover (SM)
   MT-RJ Loopback

Select MT-RJ Loopback
   100: Vertical Version
   200: Horizontal Version

Select SC Loopback
   100: Black Back Shell Cover - Std.
   200: Yellow Back Shell Cover
   600: Orange Back Shell Cover
   N00: Other Color

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