**Features**
- Extremely low PMD
- High Isolation
- Low Insertion loss
- High Stability
- High Reliability
- Cost Effective

**Applications**
- Broadband SLD source
- Fiber Optic Sensor
- Test and Measurement
- Instrumentation

**Product Description**
This series optical Isolator is a passive device based on TGG material to provide a broad band laser transmission from 680 to 1070nm in the normal direction while minimizing back reflection and back scattering in the reverse direction for any state of polarization. With Agiltron’s proprietary configuration, the new isolator features extremely low polarization mode dispersion (PMD) in addition of low insertion loss, high isolation, compact structure, and high stability. This unique performance attribute makes it an ideal choice for very broadband SLD sources widely used in OCT and other optical fiber sensing systems. We currently offer a full range of polarization independent, single mode and multimode versions. Agiltron also provides customized design to meet special application or cost requirements.

**Performance Specifications**

<table>
<thead>
<tr>
<th>Extremely Low PMD Isolator</th>
<th>Min</th>
<th>Typical</th>
<th>Max</th>
<th>Unit</th>
</tr>
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<tbody>
<tr>
<td>Operating Wavelength</td>
<td>680</td>
<td>-1070</td>
<td>nm</td>
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<tr>
<td>Insertion Loss [1]</td>
<td>0.8</td>
<td>1.2</td>
<td>dB</td>
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<tr>
<td>Wavelength Dependent Loss</td>
<td></td>
<td>0.2</td>
<td>dB</td>
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<tr>
<td>Peak Isolation</td>
<td>24</td>
<td>27</td>
<td>dB</td>
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<tr>
<td>PDL</td>
<td>0.1</td>
<td>0.2</td>
<td>dB</td>
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<tr>
<td>PMD</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>SMF version</td>
<td>0.02</td>
<td>0.04</td>
<td>ps</td>
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<tr>
<td>MMF version</td>
<td>0.05</td>
<td>0.12</td>
<td>ps</td>
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<tr>
<td>Return Loss</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMF version</td>
<td>50</td>
<td></td>
<td>dB</td>
<td></td>
</tr>
<tr>
<td>MMF version</td>
<td>35</td>
<td></td>
<td>dB</td>
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<tr>
<td>Optical Power Handling</td>
<td>300</td>
<td></td>
<td>mW</td>
<td></td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-10</td>
<td>60</td>
<td>°C</td>
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</tr>
<tr>
<td>Fiber Type</td>
<td>See order information</td>
<td></td>
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<tr>
<td>Package Dimension</td>
<td>See design</td>
<td></td>
<td>mm</td>
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</tbody>
</table>

[1]. Measured without connectors. For MMF version, measured at CPR =14dB.
Order Information

15 Presidential Way, Woburn, MA 01801  Tel: (781)935-1200  Fax: (781)935-2040  
www.agiltron.com

Ordering Information

<table>
<thead>
<tr>
<th>Type</th>
<th>Wavelength</th>
<th>Grade</th>
<th>Package</th>
<th>Fiber Type</th>
<th>Fiber Length</th>
<th>Connector</th>
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<tbody>
<tr>
<td>Polarization</td>
<td>1060nm = 1</td>
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<tr>
<td></td>
<td>1030nm = 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>980nm = 9</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>850nm = 8</td>
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<td></td>
<td>780nm = 7</td>
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<td>660nm = 6</td>
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<td>Special = 0</td>
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</tbody>
</table>

Extremely low PMD = 2

Small = S

Large = L

HI1060 = 2
HI980 = 9
HI780 = 7
MM50/125 = 5
Special = 0

Bare fiber=1
900um Loose tube=3
Special=0

0.25M=1
0.5M=2
1.0M=3
Special=0

None=1
FC/PC=2
FC/APC=3
SC/PC=4
SC/APC=5
ST/PC=6
LC=7
Special=0

Mechanical Dimensions: Unit: mm

Box for wavelength shorter than 900nm

Box for wavelength 960 ~ 1070nm