Acrobat™ Dynamic Polarization Rotators

Solid-state, High-speed Polarization Rotators

Boston Applied Technologies’ Acrobat™ Polarization Rotator provides a continuously rotation of any polarized light with the applied control voltage. The device acts as a half-wave plate with a rotating axis. The OptoCeramic® technology enables high-speed, solid-state polarization rotation in a compact package. Both free space and fiber in-line versions are available, with wavelength range from visible to mid-infrared.

Features

- Precise, high-speed polarization rotation control
- Excellent optical performance
- 180 degree polarization rotation
- All solid-state construction in a compact package

Applications

- Polarization switching
- Optical networks using polarization-maintaining fiber
- Polarization management
- Instrumentation
- Variable digital group delay
### Key Optical Specifications

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wavelength Range</td>
<td>1310nm / 1550nm (S, C, L)</td>
</tr>
<tr>
<td>Insertion Loss</td>
<td>&lt;1.0 dB</td>
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<tr>
<td>Polarization Rotation</td>
<td>180 degree</td>
</tr>
<tr>
<td>Response time</td>
<td>&lt; 100µs</td>
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<tr>
<td>Input Power</td>
<td>&lt; 300 mW</td>
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<tr>
<td>Return Loss</td>
<td>≥ 55 dB</td>
</tr>
<tr>
<td>Dimensions (Approximately)</td>
<td>26 x 10 x 9 mm</td>
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<tr>
<td>Operating Temperature Range</td>
<td>0°C to 70°C</td>
</tr>
<tr>
<td>Storage Temperature Range</td>
<td>-40°C to 85°C</td>
</tr>
</tbody>
</table>

**Notes:**
1. Unless otherwise specified, all measurements are at 25°C.
2. Meets or exceeds Telcordia GR1221 and GR1209 specifications.
3. Also available in visible and mid-infrared wavelength.

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**For More Information**

For more information about Boston Applied Technologies' leadership in polarization control technology and other electro-optical modules and components, visit our website at www.bostonati.com.

To obtain additional technical information or to place an order for this product, please contact us:

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