



EEOptics Corporation

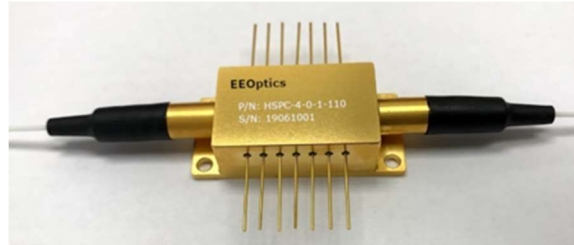
High Speed Polarization Rotator/Modulator

Features

- Precise, high-speed polarization rotation control
- Linear Response
- 180 degree polarization rotation
- Long Life Time
- Low Loss
- Compact in Size
- Wide Response Bandwidth

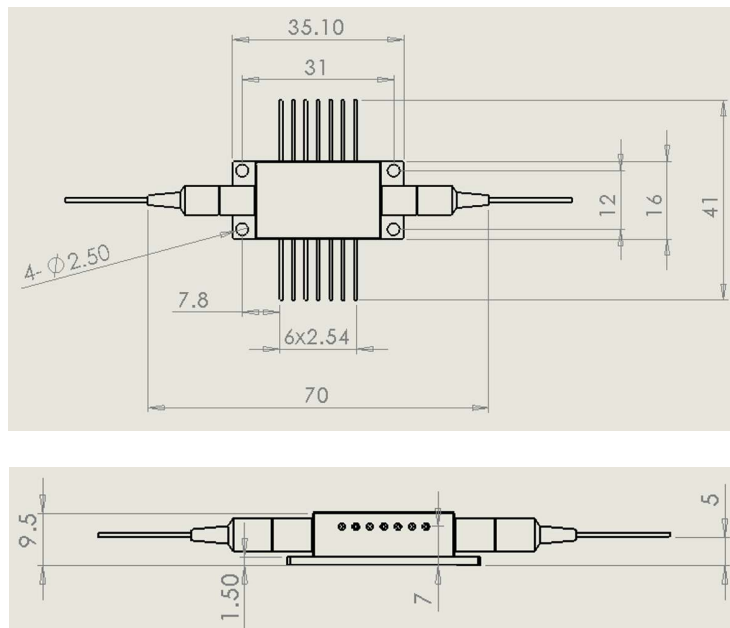
Applications

- Polarization switching
- Polarization Scrambler
- Variable digital group delay
- Polarization management
- Interferometers and Sensing systems



EEOptics Corporation's Polarization Rotators/Modulators provide a continuous rotation of any polarized light with the applied control voltage in high modulation rate. They are developed based on EEO crystals and can rotate State of Polarization (SOP) through phase retardation. EEOptics' polarization rotators are fast with less than 10 μ s response speed, linear response to the control signal, long lifetime without limitation on the cycles, solid state without moving parts, completely vibration free, and compact in size.

Dimensions





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| Specifications | |
|---|--|
| Parameters | |
| Optical Performances | |
| Operating Wavelength | 1550nm or 1310nm ¹ |
| Insertion Loss (IL) | <0.8dB |
| Polarization Dependence Loss (PDL) | <0.2dB |
| Return Loss | >50dB |
| Optical Power Handling | 500mW ² |
| Electrical Performances | |
| Response Time (Rise/Fall Time) | <10 μ s ³ |
| V π (@room temperature) | V π <75V (@1550nm), V π <65V (@1310nm) |
| Modulation Rate | DC~ 130kHz ⁴ |
| Physical/Environmental Performances | |
| Operating Temperature | 0 ~ 80° C |
| Storage Temperature | -40 ~ 80°C |
| Dimension | 70mm x 41mm x 9.5mm |
| Notes: | |
| <ol style="list-style-type: none"> Other wavelengths are available High power version is available Driver dependent Higher modulation rates are available | |

Ordering Information

| PRM- | Wavelength | Package | Fiber type | | Connector |
|--|---|--|---|--|--|
| | | | Input | Output | |
| 0 – Polarization Rotator 1 – Polarization Modulator S – Special | 0 - 1550 1 - 1310 2 - 1064 S - Special | 0 – Butterfly(w/o TEC) OT –Butterfly(w/TEC) S - Special | 1 - Single mode fiber 2 - PM Panda fiber S - Special | 0 - Bare fiber 1 - 0.9mm loose tube S - Special | 0 - None 1 - FC/APC 2 - FC/PC S - Special |

For example:

P/N: PRM-0-1-0-11-1-00

Description: High Speed Polarization Rotator, 1310nm, butterfly package, without TEC, single mode fiber in/out, 0.9mm loose tube, without connectors on both ends