



Integrated Optical Phase Modulator

Fiber-coupled electro-optical light-modulator



Features

The Integrated Optical Phase Modulator is a compact fiber-coupled electro-optical modulator that works based on MgO:LiNbO₃ and LiNbO₃ crystals. Providing fast electro-optical response, it allows phase modulation with frequencies as high as the Gigahertz range. Available modulators can handle wavelengths in the visible and the infrared spectral range. Standard-designed modulators use polarization maintaining single mode fibers to couple the light in and out. They may also be configured with fiber systems or connectors of different types. Each modulator may be fitted with an analog amplifier unit on special request.

Benefits

- Application in the VIS or IR spectrum
- High modulation frequencies
- Single mode fiber coupling
- Low modulation voltage

Applications

- Analog and digital modulation
- Sideband generation
- Interferometric metrology
- Optical coherence tomography

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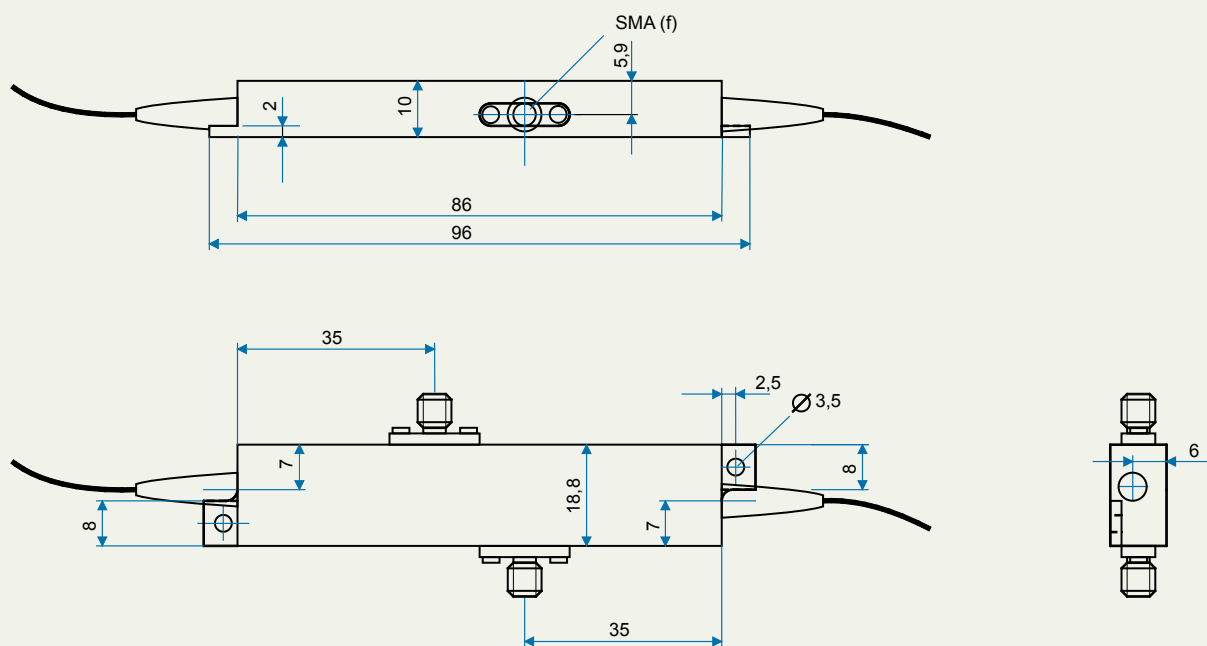
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Specifications

Wavelength [nm]		532	635	830	1064	1300	1550
Other wavelengths not listed here on request							
Spectral bandwidth [nm]		± 15	± 20	± 40	± 60	± 100	± 100
Insertion loss, typical [dB]		7	6	5	4	4	3
Frequency response	Standard version	100 Hz ... 1 GHz					
	HF version	100 Hz ... 5 GHz					
Optical connection, input	Standard	Polarization maintaining single mode fiber					
	Fiber connector	Bare fiber, FC/PC or FC/APC connector					
Optical connection, output	Standard	Polarization maintaining single mode fiber					
	Optional	Single mode or multi mode fiber					
	Fiber connector	Bare fiber, FC/PC or FC/APC connector					
Half wave voltage, typical	Standard version	4 V	6 V	8 V	10 V	16 V	16 V
	HF version	4 V	6 V	6 V	6 V	10 V	10 V

Dimensions
(L x W x H, housing without fiber connectors) 96 mm x 19 mm x 10 mm

Dimensions Phase Modulator



It is our policy to constantly improve the design and specifications. Accordingly, the details represented herein cannot be regarded as final and binding.



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