

## Polarization effect: Comparison of different Laser Sources

- Transmission over 270m OM1 fiber with a kink with controlled offset launch in the area of the kink (about 21µm)
- Pattern records for three lasers: DFB, VCSEL, FP
  - Adjustment of offset to the situation where a double pulse of equal height is observed with one polarization.
  - Comparison of patterns for both orthogonal polarizations.

#### Result:

- DFB and VCSEL are similar.
- FP Laser shows different pattern. This may be caused by larger number of modes (wavelength) of the laser.

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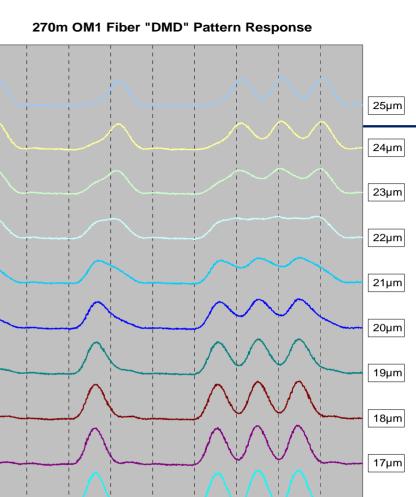


Offset Area of Kink-Fiber for the Measurement

1

Offset area for the measurement

J. Intensity



0,0E+00 2,0E-10 4,0E-10 6,0E-10 8,0E-10 1,0E-09 1,2E-09 1,4E-09 1,6E-09 1,8E-09 2,0E-09 Time [sec]

15µm

10µm

5µm

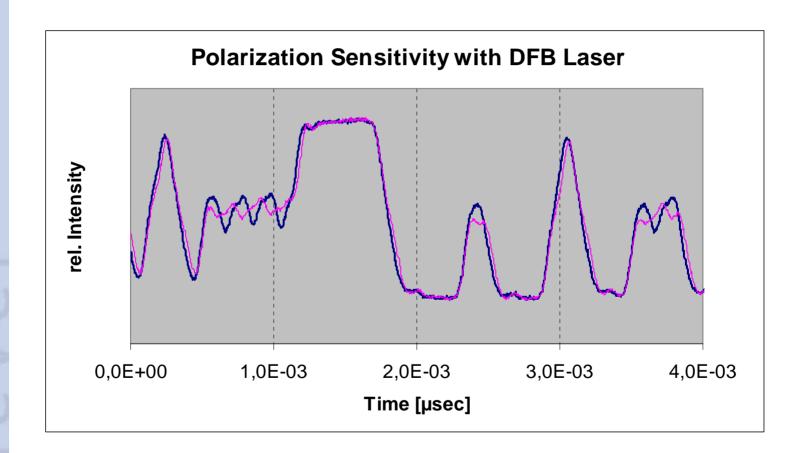
0 µm

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### Fiber with a Kink Polarization Effect with DFB-Laser

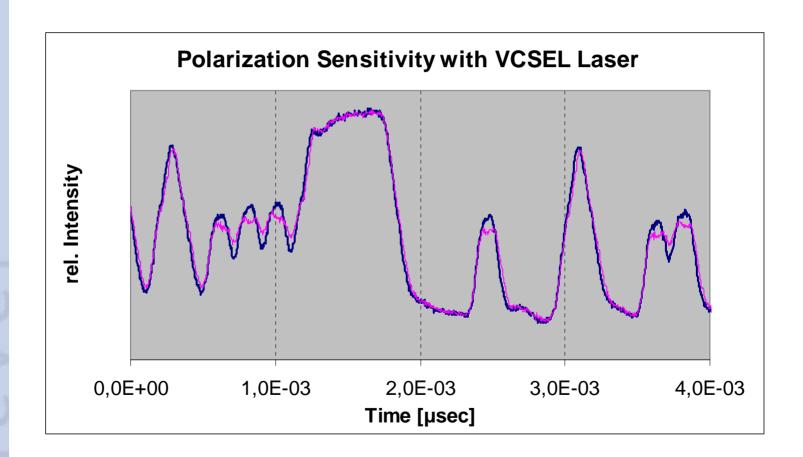


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# Fiber with a Kink Polarization Effect with 1300nm- VCSEL

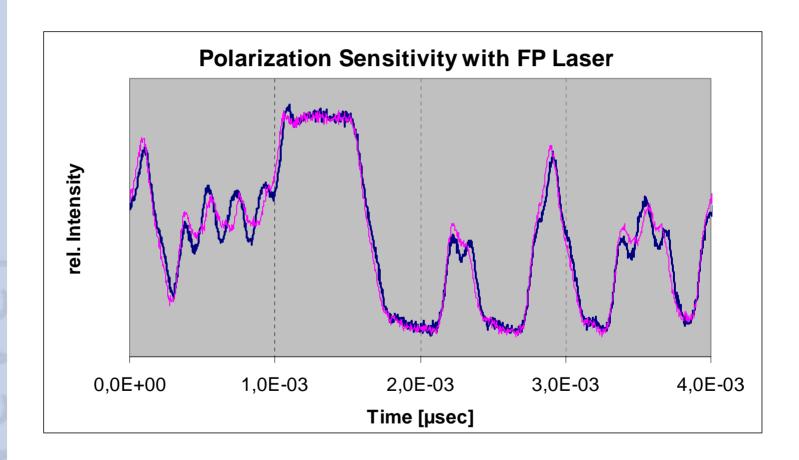


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#### Fiber with a Kink Polarization Effect with FP Laser



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