api technologies corp.

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An API Technologies Company

IR POLARIZER PRODUCT BRIEF

API Nanotronics Introduces High Performance IR Polarizers from its NanoOpto Division based on advanced nanooptics and proprietary processing techniques. Useful for a variety of wavelengths, these reflective wire grid polarizer devices are particularly ideal from 1200-1600 nm.

KEY FEATURES AND BENEFITS

Optical Performance

- Transmission channel –
  - Insertion loss ≤0.18dB
  - Extinction ratio over 10000:1 (>40dB) available
- Optimized versions at 1310 nm, 1490 nm and 1550 nm

Substrate Capability

- Very large substrate sizes available
- Full wafer sizes to custom diced parts
- Thicknesses down to 0.1 mm

Operating temperature range

- -40° to 80°C
- Wider range capable

Applications

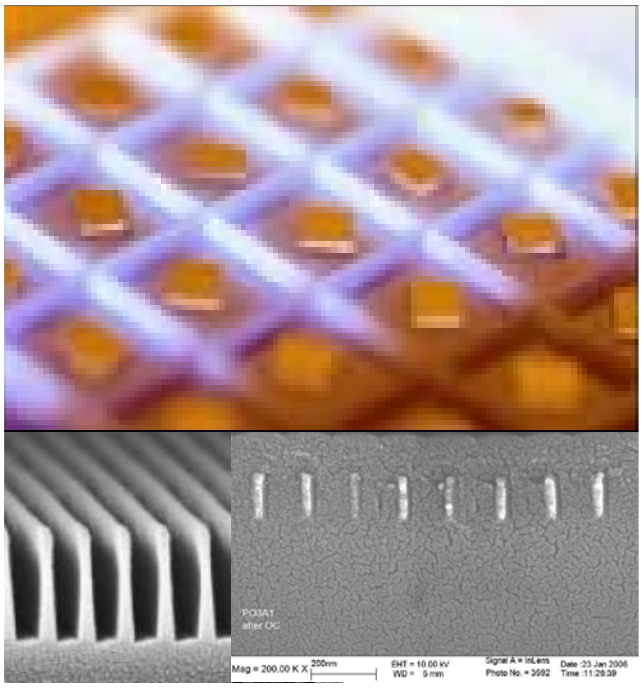
- Telecom
- Optical Isolators
- Optical Modulators
- Fiber Networks
- Scientific Equipment
- Polarization Switches

Ultrathin -
Active polarization layer <1micron

Durable –
Protected nanowire arrays via atomic layer deposition (ALD)

Strong optical performance –
High transmission and E.R.

Flexibility –
Fabrication on many substrates and sizes



IR POL Product Specifications			
Performance		**IR Pol**	**Comment**
Wavelength Range		1310,1490,1550,± 20 nm	Custom wavelengths available
Transmission	**IL**	<0.18 dB	<0.13 dB available
	Extinction Ratio	>35 dB Version A >40 dB Version B	
Angle of Incidence		0°±7.5°	
Input Polarization		0°/45°±1°	
Size		1-25 mm ±0.03 mm	Different sizes available
Thickness		0.1-0.5 mm	Custom thicknesses available
Edge Chipping		<50 µm	
Substrate Material		BK7, S-BSL7	Custom substrates available
Operating Temperature		-40°~85° C	
Reliability		Pass GR1221	

Find out more about NanoOpto at:
www.nanoopto.com

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