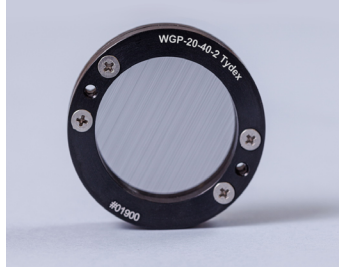




Microwave Wire Grid Polarizers

For microwave range we produce wire grid polarizers intended to polarize radiation in between 2-3 GHz and 300 GHz. They are made of 20 μm thick parallel tungsten wires mounted in a holder with no substrate.



Applications:

- Spectroscopy;
- Polarimetry;
- Astronomy;
- Antenna engineering.

Features:

- Can withstand high energies of incident radiation;
- Due to no substrate provide high transmissivity of desired polarization;
- Provide high degree of polarization;
- Made of tungsten wires;
- Mounted in holders (protective rings marked with wire direction).

The advantages of wire grid polarizers over polypropylene grid polarizers:

- Better transmission of desired polarization due to no substrate;
- Can withstand high-intensity radiation.

Specification:

Wavelength range, μm	≥ 600
Holder diameter, mm	≤ 152
Working aperture, mm	≤ 136
Transmission of desired polarization K1, %	> 95
Transmission of non-desired polarization K2, %	< 0,1
Extinction coefficient $E=10*\text{Log}(K1/K2)$, dB	> 30

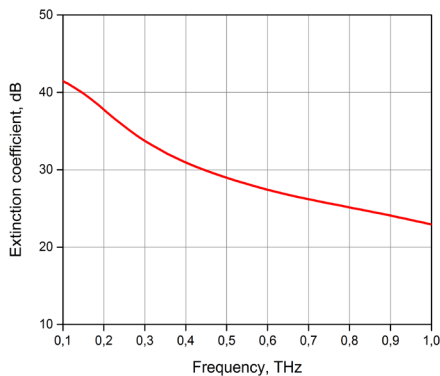


Fig. 1. Extinction coefficient, dB

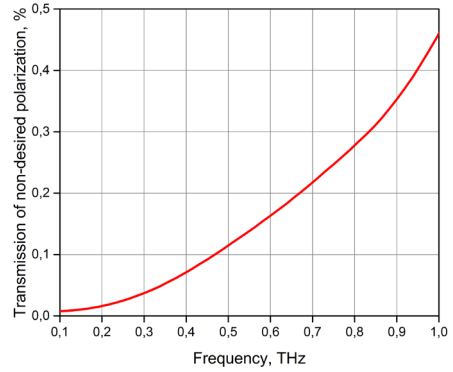


Fig. 2. Transmission of non-desired polarization, %

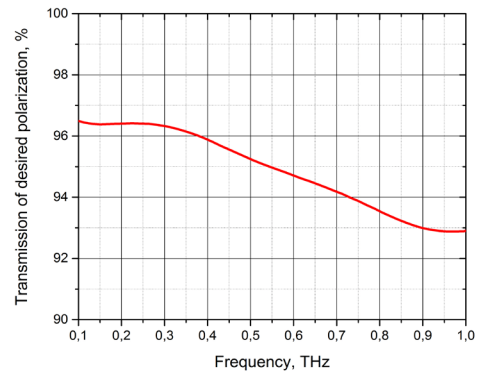


Fig. 3. Transmission of desired polarization, %

Polarizers are supplied in a round (2 - 6 inch diameter) holder. Working aperture is 36 mm for 2-inch and 136 mm for 6-inch polarizer.

For price quotation and delivery please send us an e-mail or fill in our web site request form.