BATOP optoelectronics

FS-SANOS-1064-15ps-2

Data sheet of free-space SANOS @ λ = 1064 nm with two RSAM

SANOS – Saturable noise suppressor

SANOS applications

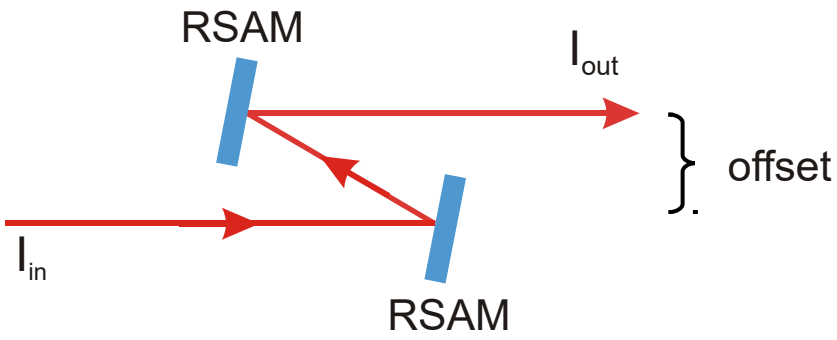
- Suppression of noise (ASE – amplified spontaneous emission) after an optical amplifier
- Suppression of remaining pulses after a pulse picker

Main FS-SANOS data

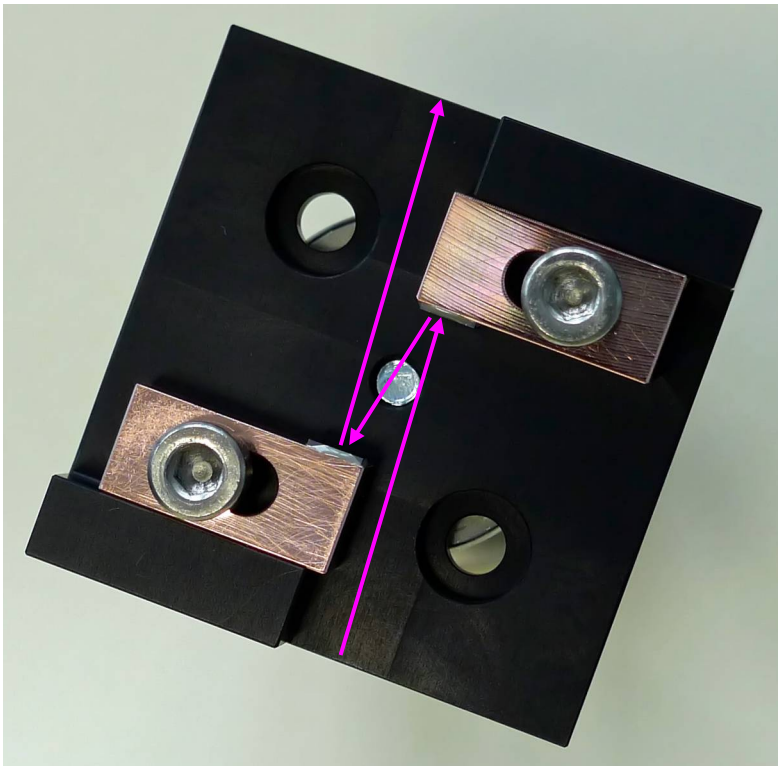
Resonance wavelength	λ = 1040 …1064 nm
Full width at half maximum	FWHM = 17 nm
Noise suppression ratio	> 20 dB
Insertion loss	6 dB
Saturation fluence	Φ_{sat} = 10 µJ/cm^2 @ noise suppression of 20 dB
Relaxation time constant	τ = 15 ps
Parallel beam offset	2 mm
Mirrors	two RSAM, size: 4 mm x 4 mm
Angle of incidence on mirrors	8°

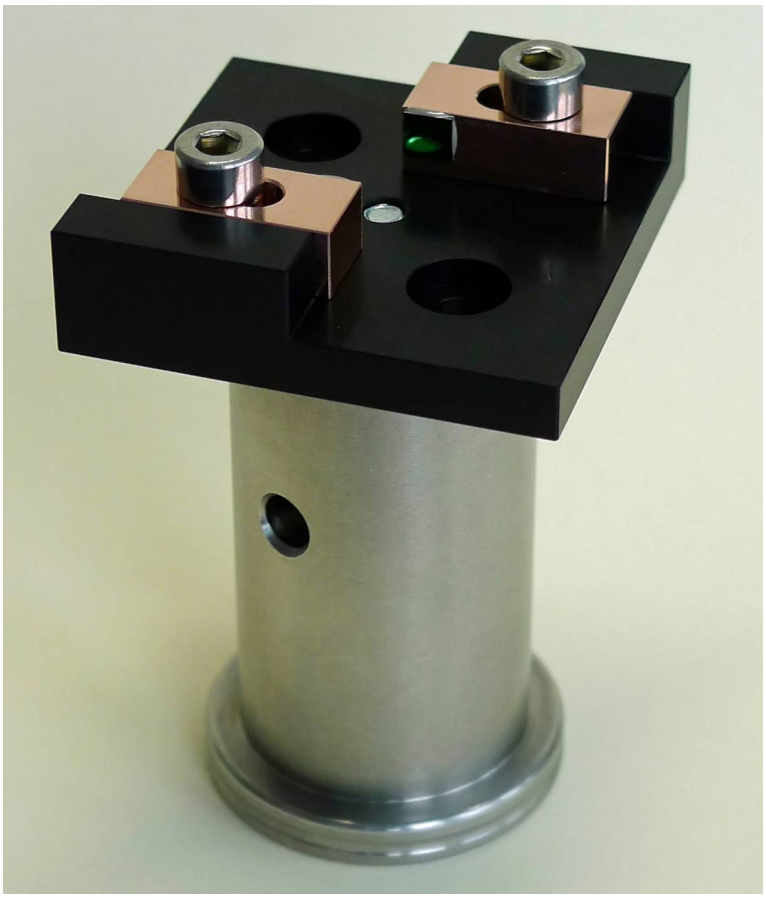
FS-SANOS-2 description

A FS-SANOS-2 consists of two resonant saturable absorber mirrors (RSAM). The beam goes true the free-space SANOS without changing of the direction, but with a parallel offset of 2 mm. The RSAM has a strong non-linear reflectance. For a low input signal level the transmittance of the FS-SANOS-2 is lower than 0,1% (99,9 % loss), whereas high intensity pulses are transmitted with a lower loss of 75 %. The input is isolated better than 50 dB. To meet exactly the low-intensity reflectance minimum the input beam inclination can be changed by some degrees.

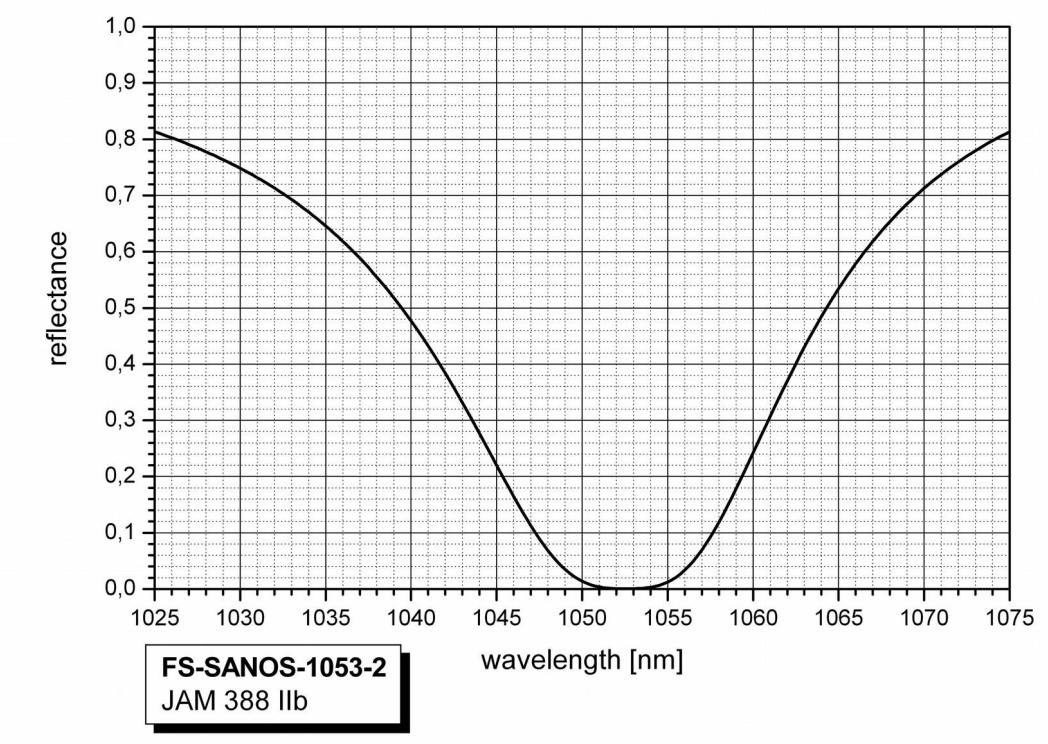


FS-SANOS-1064-2





Low intensity spectral transmittance of a FS-SANOS-1053-2



Low intensity spectral transmittance of a FS-SANOS-1040-2