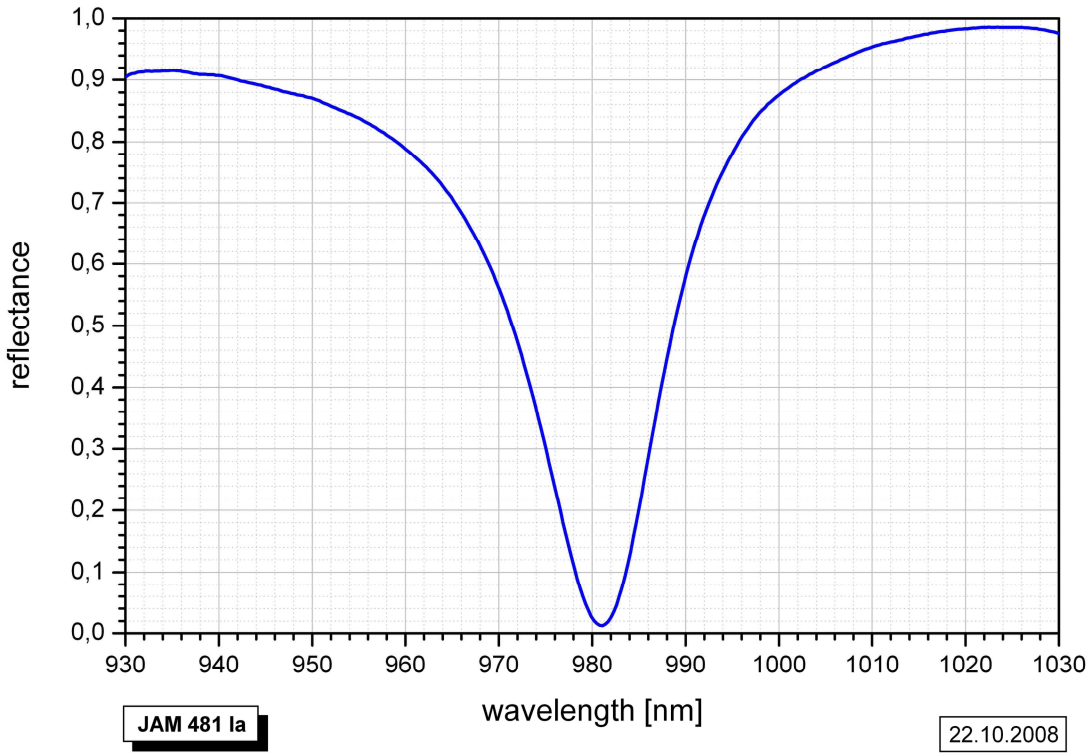
BATOP optoelectronics

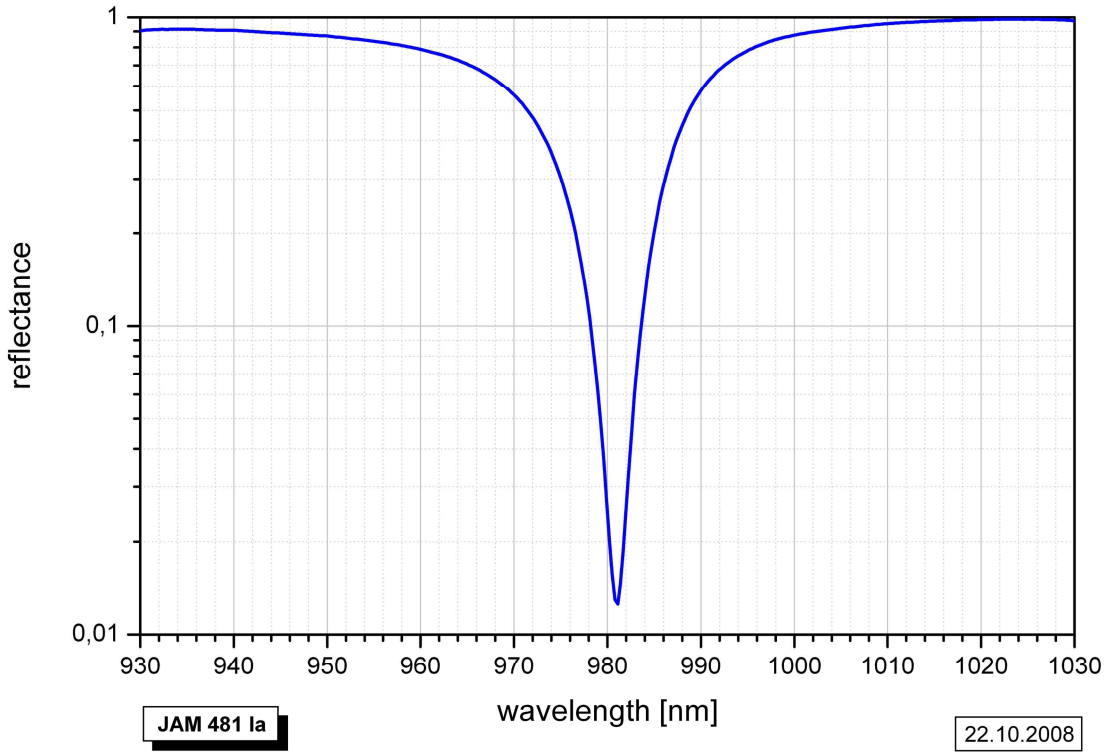
RSAM data sheet RSAM-980-x, λ = 980 nm

RSAM - Resonant saturable absorber mirror

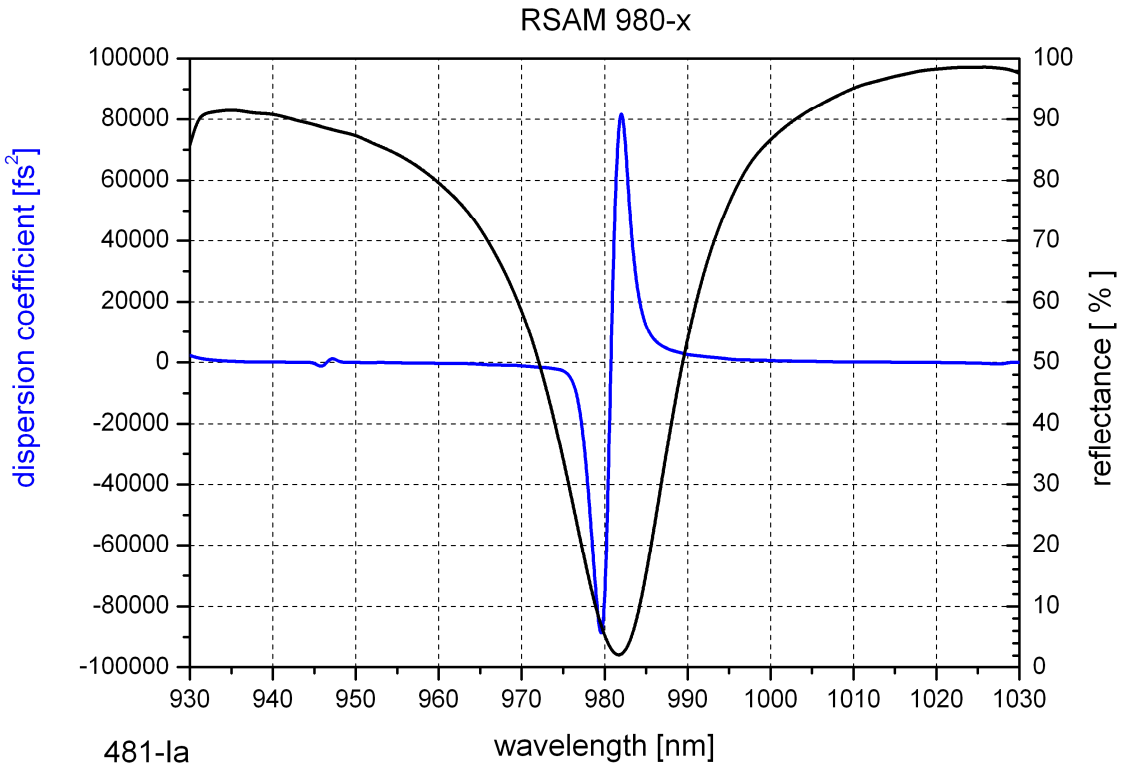
Working wavelength	λ = 975…984 nm (angle and temperature dependent)
Full Width at Half Maximum	FWHM = 16 nm
Low intensity absorptance	A = 99 %
Low intensity reflectance	R_{min} ~ 1 %
Saturation fluence	Φ_{sat} = 15 µJ/cm^2
Relaxation time constant	τ ~ 1 ps
Non-saturable loss	A_{ns} = 40 %
Chip area	4.0 mm x 4.0 mm; other dimensions on request
Chip thickness	450 µm
Front side	dielectric cover
Mounting of RSAM-980-**x**	denotes the type of mounting as follows:
x = 0	unmounted
x = 12.7 g	glued on a gold plated Cu-cylinder with 12.7 mm ∅
x = 25.4 g	glued on a gold plated Cu-cylinder with 25.4 mm ∅
x = 12.7 s	soldered on a gold plated Cu-cylinder with 12.7 mm ∅
x = 25.4 s	soldered on a gold plated Cu-cylinder with 25.4 mm ∅
x = FC	mounted on a 1 m monomode fiber cable with FC/PC connector
x = FC/PC with TEC	mounted on a 1 m monomode fiber cable with FC/PC or other connector type and TEC (thermoelectric cooler) for fine tuning of the resonance wavelength

Unsaturated spectral reflectance, measured at room temperature with 7° angle of incidence





Low intensity spectral reflectance and dispersion coefficient D_2



Group Delay Dispersion (GDD)

Dispersion coefficient $D_2(\omega) = \frac{\partial^2 \varphi}{\partial \omega^2}$ with φ - reflected phase

$\omega = 2\pi \frac{c}{\lambda}$ - angular frequency

Influence of the angle of incidence on the resonance wavelength