BATOP optoelectronics

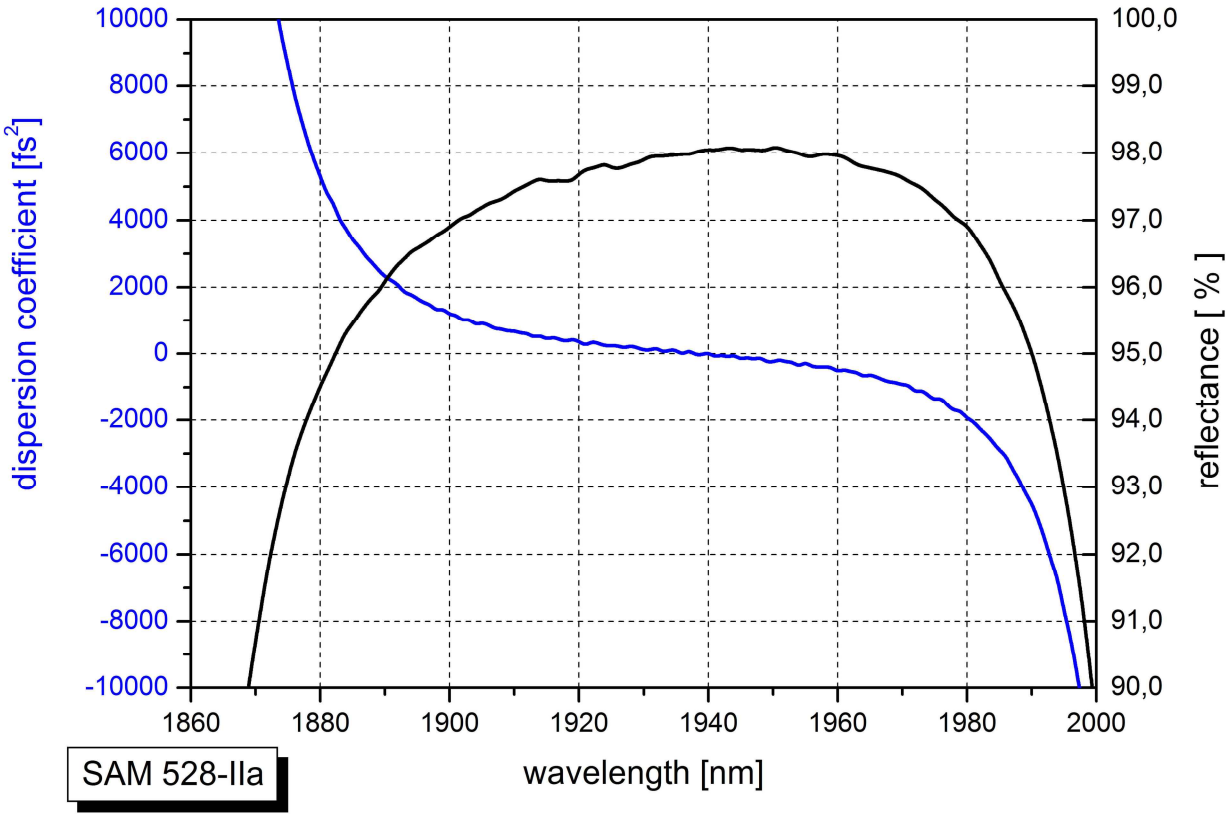
SAM™ Data Sheet SAM-1920-2-30ps-x, λ = 1920 nm

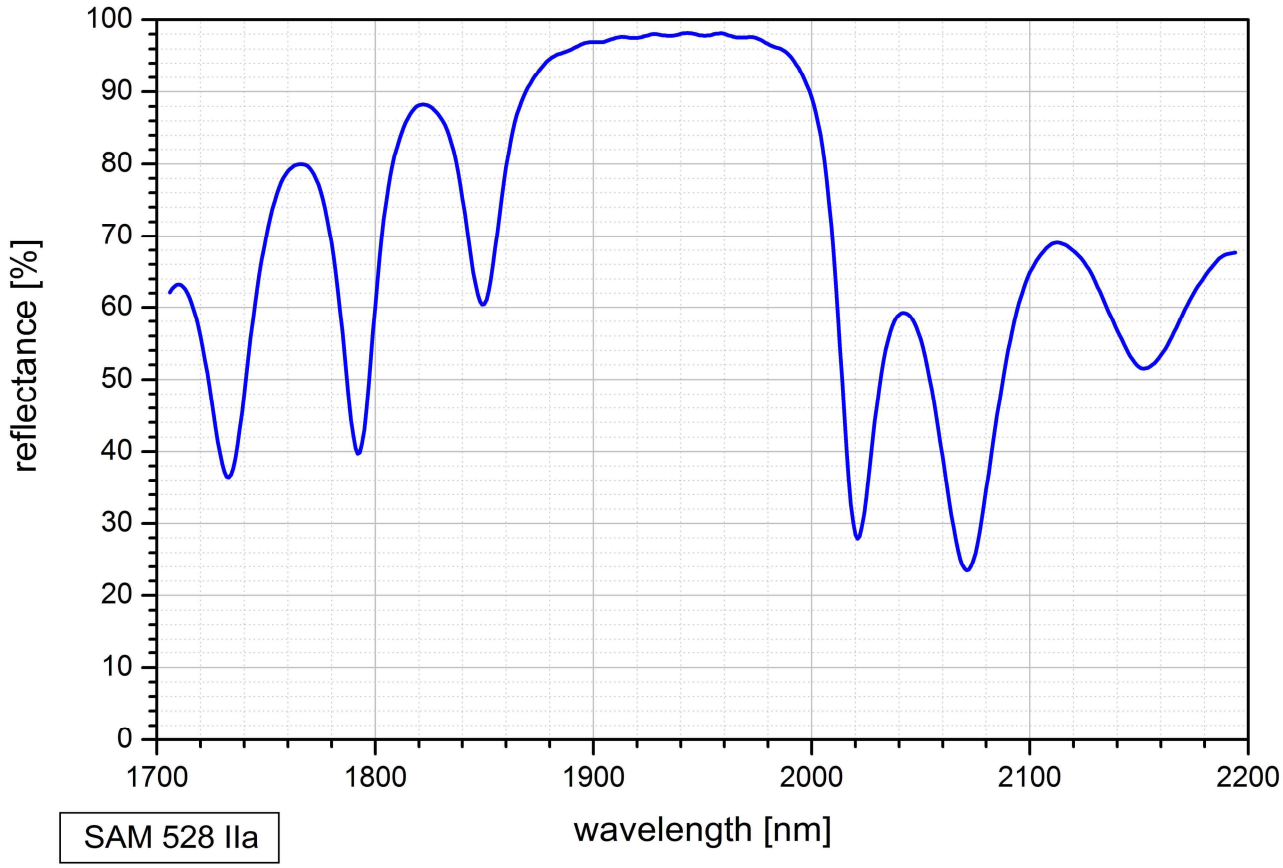
Laser wavelength	λ = 1920 nm
High reflection band	λ = 1880 .. 1980 nm
Absorbance	A_0 = 2 %
Modulation depth	ΔR = 1.2 %
Non-saturable loss	A_{ns} = 0.8 %
Saturation fluence	Φ_{sat} = 45 µJ/cm^2
Relaxation time constant	τ ~ 30 ps
Damage threshold	Φ = 4 mJ/cm^2
Chip area	4.0 mm x 4.0 mm; other dimensions on request
Chip thickness	450 µm
Protection	the SAM is protected with a dielectric front layer

Mounting option **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 connector

Low intensity spectral reflectance and dispersion coefficient D_2





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

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

Pump-probe measurement

The pump-probe measurement has been done by Dr. Uwe Griebner, Max-Born-Institut Berlin, Germany. The measured data can be fitted using a twofold exponential decay function with two amplitudes A_1 and A_2 and two corresponding time constants τ_1 and τ_2.