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o p t o e l e c t r o n i c s

SAM™ Data Sheet SAM-1920-4-40ps-x, λ = 1920 nm

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Laser wavelength	λ = 1920 nm
High reflection band	λ = 1870 .. 1990 nm
Absorbance	A_0 = 4 %
Modulation depth	ΔR = 2.6 %
Non-saturable loss	A_{ns} = 1.4 %
Saturation fluence	Φ_{sat} = 35 µJ/cm^2
Relaxation time constant	τ ~ 40 ps
Damage threshold	Φ = 3 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 $\varnothing$
x = 25.4 g	glued on a gold plated Cu-cylinder with 25.4 mm $\varnothing$
x = 12.7 s	soldered on a gold plated Cu-cylinder with 12.7 mm $\varnothing$
x = 25.4 s	soldered on a gold plated Cu-cylinder with 25.4 mm $\varnothing$
x = FC	mounted on a 1 m monomode fiber cable with FC connector

Low intensity spectral reflectance and dispersion coefficient D$_2$

SAM 528-Ia

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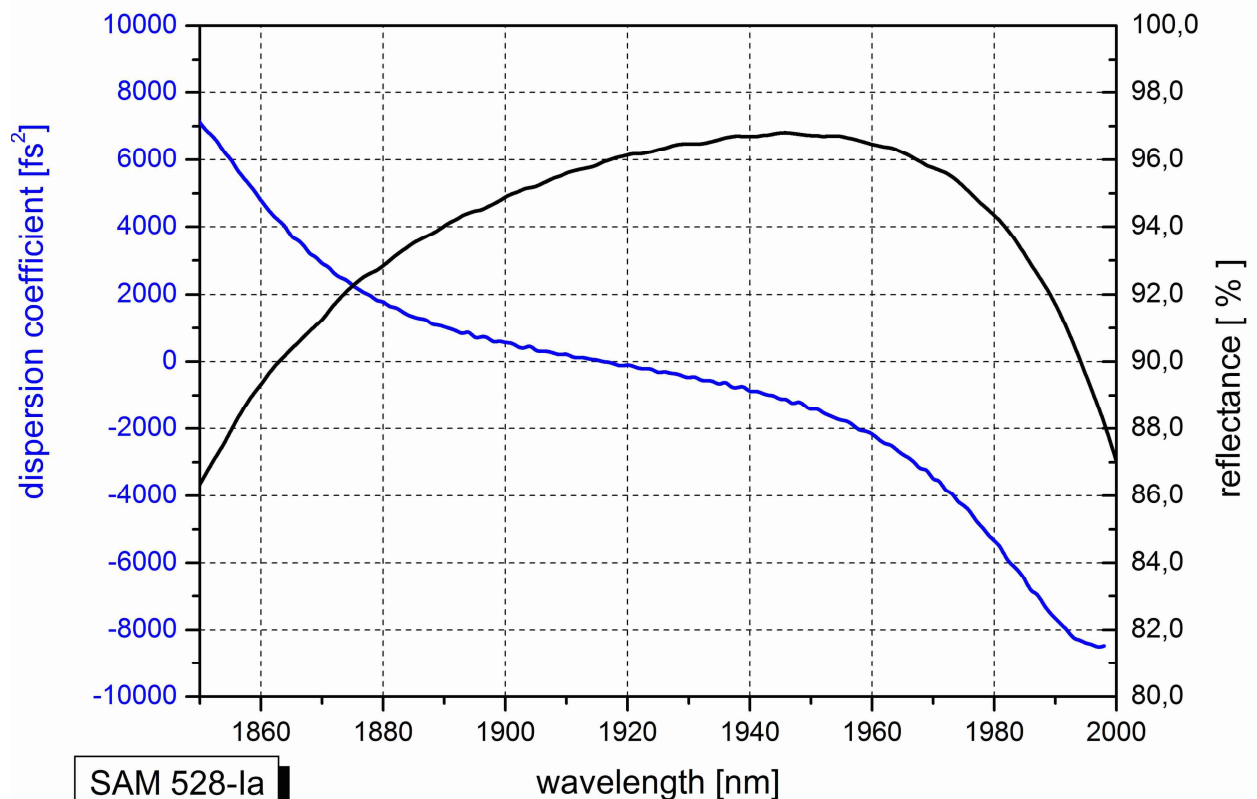
SAM 528 Ia
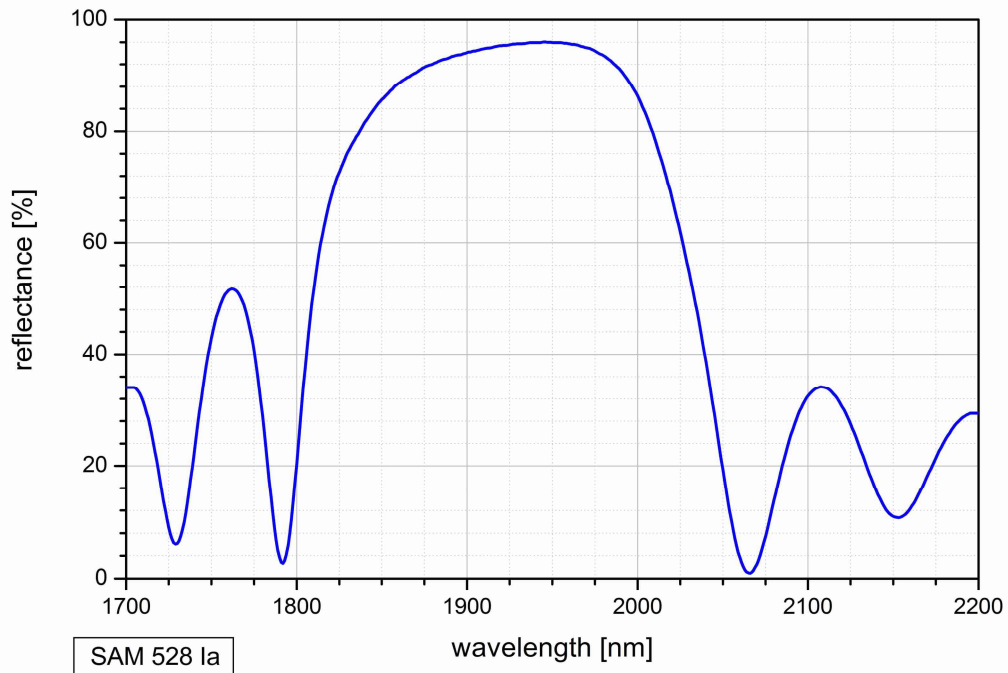
Pump-probe measurement

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.

Model: $\Delta R = A_0 + A_1 \exp(t/\tau_1) + A_2 \exp(t/\tau_2)$

$A_0 = 0.16$
$A_1 = 5.89$ $\tau_1 = 0.5$ ps
$A_2 = 0.56$ $\tau_2 = 40.7$ ps $\lambda = 1940$ nm

SAM 528-Ia