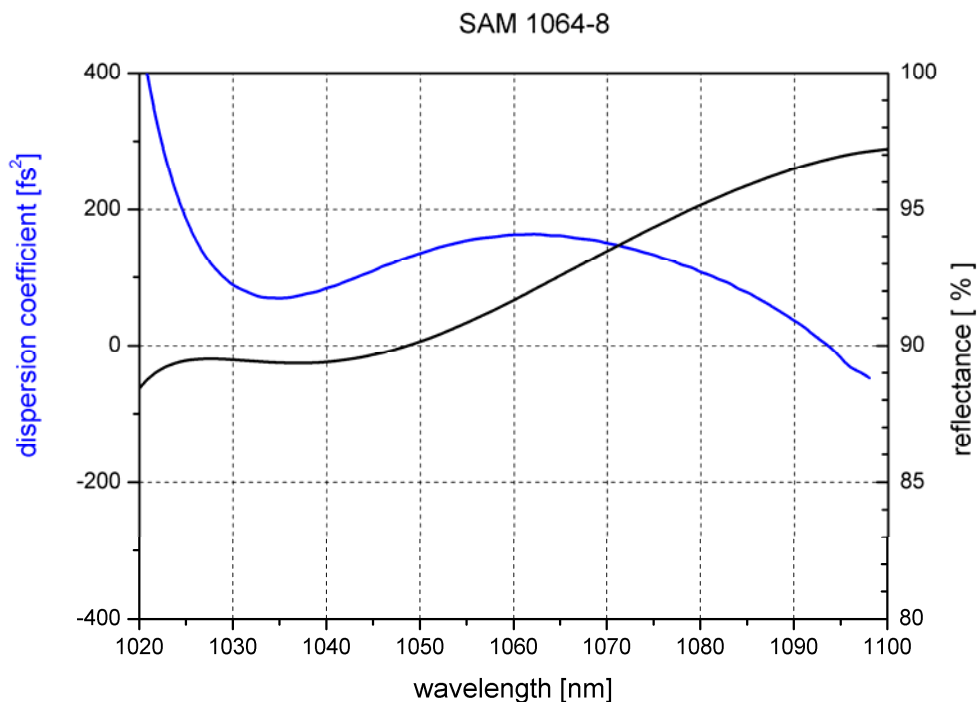


SAM™ data sheet SAM-1064-8-x-500fs, $\lambda = 1064 \text{ nm}$

Laser wavelength	$\lambda = 1064 \text{ nm}$
High reflection band (R > 90%)	$\lambda = 1030 \dots 1120 \text{ nm}$
Absorbance	$A_0 = 8 \%$
Modulation depth	$\Delta R = 6 \%$
Non-saturable loss	$A_{ns} = 2 \%$
Saturation fluence	$\Phi_{sat} = 98 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 500 \text{ fs}$
Damage threshold	$400 \text{ MW}/\text{cm}^2$
Chip area	4mm x 4mm; other dimensions on request
Chip thickness	400 μm ; optional: 150 μm on request
Protection	the SAM is protected with a dielectric front layer
Mounting of SAM-1064-8-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

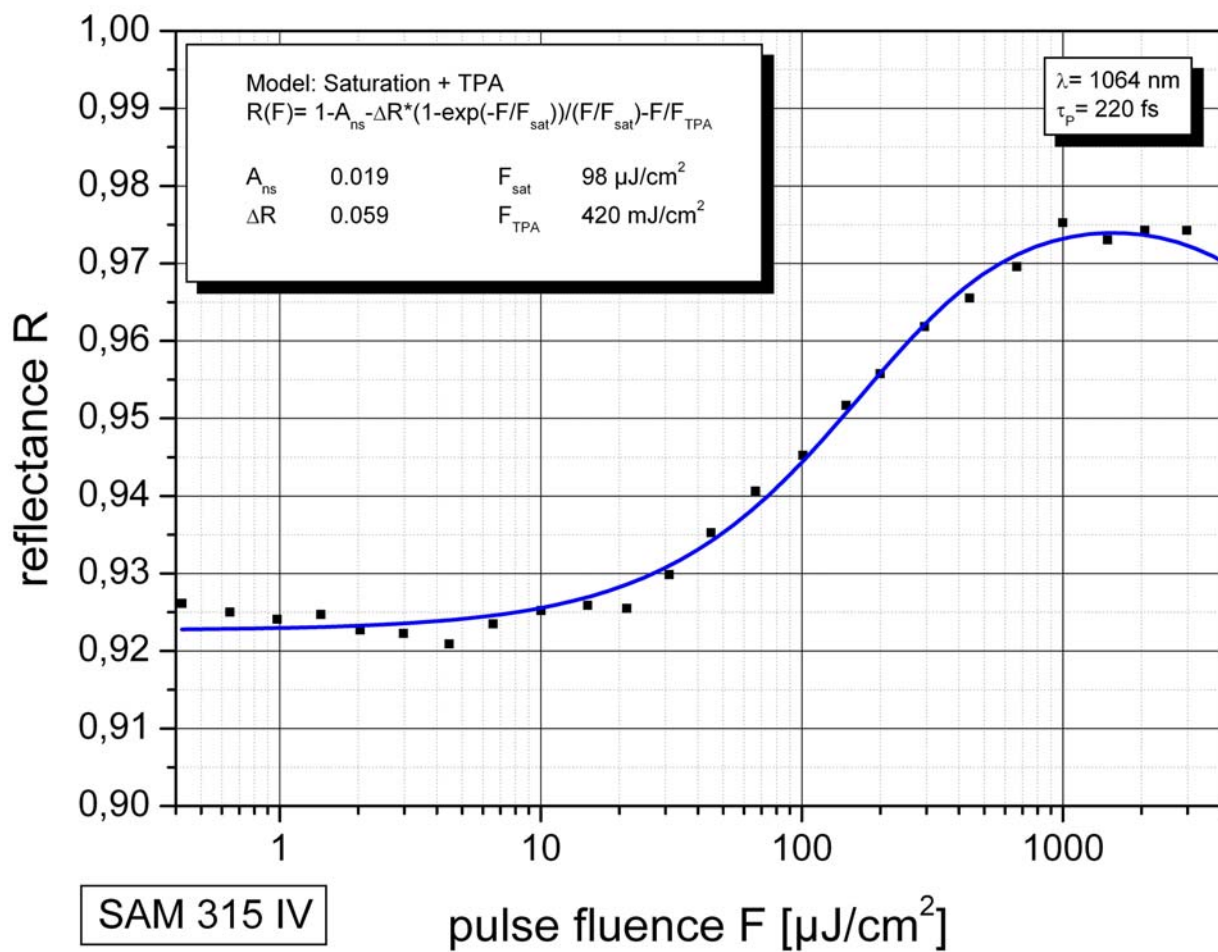


Group Delay Dispersion (GDD)

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

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

Saturation measurement



Response time

Response time of the SAM, measured in a pump-probe experiment with a 200 fs probe pulse by D. Fischer and G. Steinmeyer, MBI Berlin, Germany.

