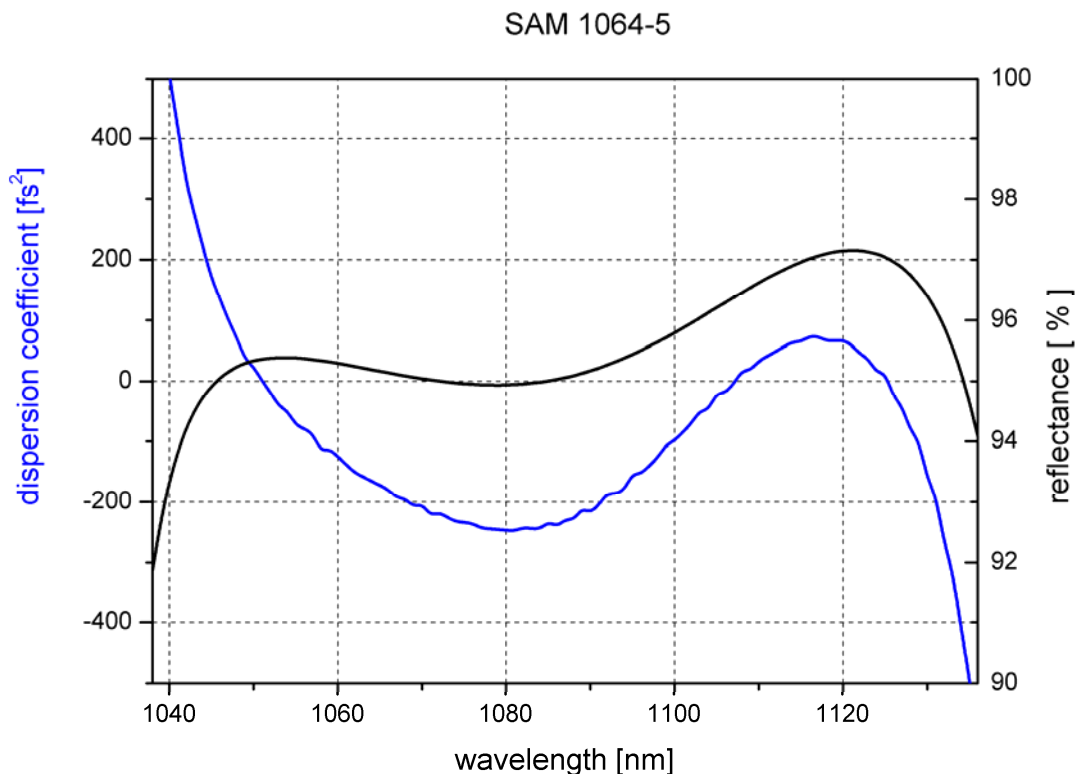


## SAM™ data sheet SAM-1064-5-x-3ps, $\lambda = 1064 \text{ nm}$

Laser wavelength	$\lambda = 1064 \text{ nm}$
High reflection band (R > 95%)	$\lambda = 1030 \dots 1120 \text{ nm}$
Absorbance	$A_0 = 5 \%$
Modulation depth	$\Delta R = 3 \%$
Non-saturable loss	$A_{ns} = 2 \%$
Saturation fluence	$\Phi_{sat} = 72 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 3 \text{ ps}$
Damage threshold	$500 \text{ MW}/\text{cm}^2$
Chip area	4mm x 4mm; other dimensions on request
Chip thickness	400 $\mu\text{m}$ ; optional: 150 $\mu\text{m}$ on request
Protection	the SAM is protected with a dielectric front layer
Mounting of SAM-1064-5-x-3ps	denotes the type of mounting as follows:
$x = 0$	unmounted
$x = 12.7 \text{ g}$	glued on a gold plated Cu-cylinder with 12.7 mm $\varnothing$
$x = 25.4 \text{ g}$	glued on a gold plated Cu-cylinder with 25.4 mm $\varnothing$
$x = 12.7 \text{ s}$	soldered on a gold plated Cu-cylinder with 12.7 mm $\varnothing$
$x = 25.4 \text{ s}$	soldered on a gold plated Cu-cylinder with 25.4 mm $\varnothing$
$x = \text{FC}$	mounted on a 1 m monomode fiber cable with FC connector

### Low intensity spectral reflectance and dispersion coefficient $D_2$



SAM 375-1a

### Group Delay Dispersion (GDD)

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

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

### Saturation measurement

