

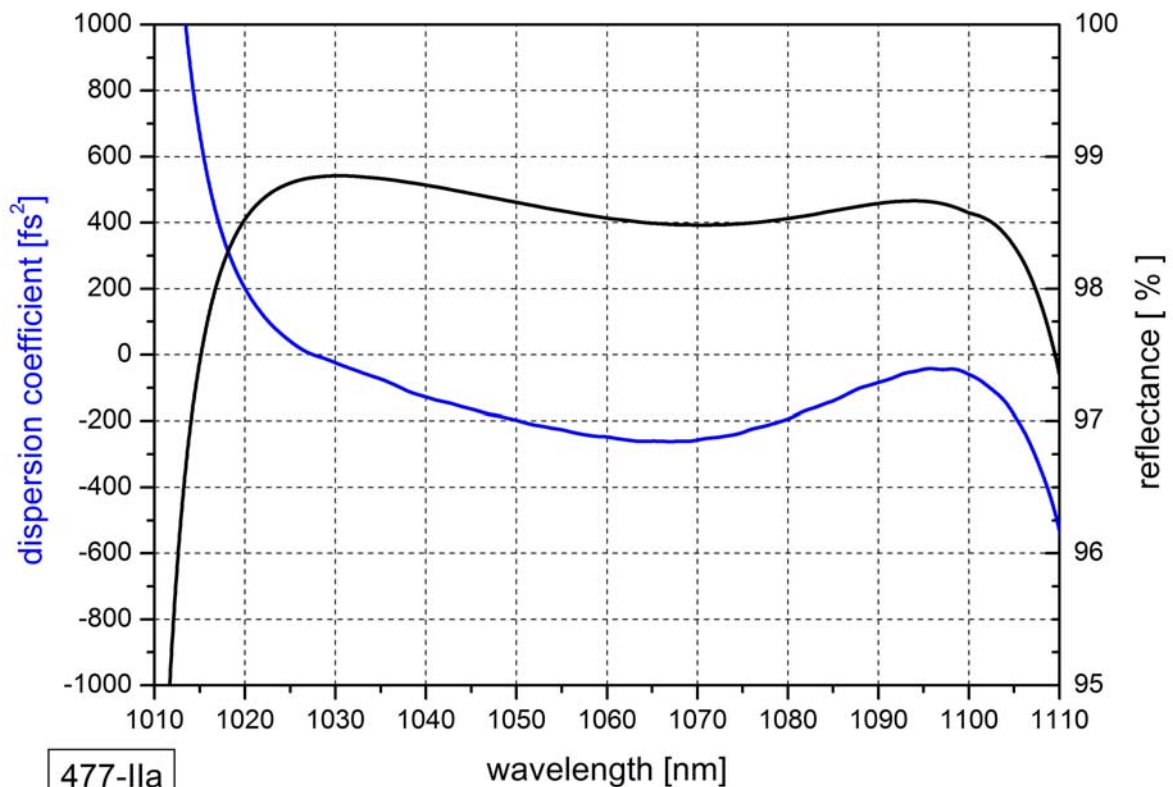
SAM™ data sheet SAM-1064-1.5-x-1ps, $\lambda = 1064 \text{ nm}$

| | |
|--------------------------------|--|
| Laser wavelength | $\lambda = 1064 \text{ nm}$ |
| High reflection band (R > 98%) | $\lambda = 1020 \dots 1100 \text{ nm}$ |
| Absorptance | $A_0 = 1.5 \%$ |
| Modulation depth | $\Delta R = 0.8 \%$ |
| Non-saturable loss | $A_{\text{ns}} = 0.7 \%$ |
| Saturation fluence | $\Phi_{\text{sat}} = 90 \mu\text{J}/\text{cm}^2$ |
| Relaxation time constant | $\tau \sim 1 \text{ ps}$ |
| Damage threshold | $900 \text{ MW}/\text{cm}^2$ |
| Chip area | 4mm x 4mm; other dimensions on request |
| Chip thickness | 400 μm |
| Protection | the SAM is protected with a dielectric front layer |

Mounting of SAM-1064-1.5-x-1ps 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 |
| $x = 25.0 \text{ w}$ | soldered on a water cooled Cu-cylinder with 25.0 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



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

