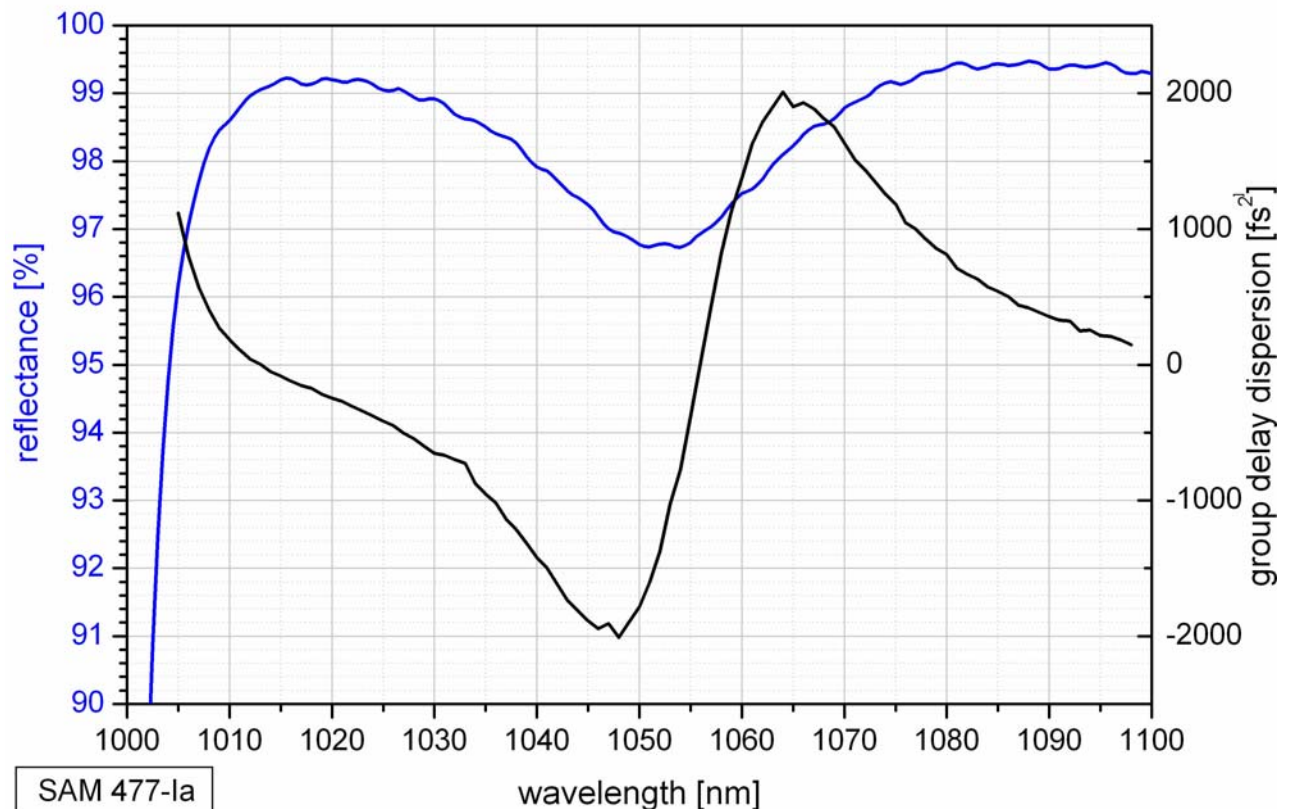


SAM™ data sheet SAM-1040-2-x-1ps, $\lambda = 1040 \text{ nm}$

| | |
|--------------------------------|---|
| Laser wavelength | $\lambda = 1040 \text{ nm}$ |
| High reflection band (R > 96%) | $\lambda = 1010 \dots 1090 \text{ nm}$ |
| Absorbance | $A_0 = 2 \%$ |
| Modulation depth | $\Delta R = 1.2 \%$ |
| Non-saturable loss | $A_{ns} = 0.8 \%$ |
| Saturation fluence | $\Phi_{sat} = 60 \mu\text{J}/\text{cm}^2$ |
| Relaxation time constant | $\tau \sim 1 \text{ ps}$ |
| Damage threshold | $800 \text{ MW}/\text{cm}^2$ |
| 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-1040-2-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 = 25.4 w | soldered on a water cooled 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 group delay dispersion



SAM 477-la

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

