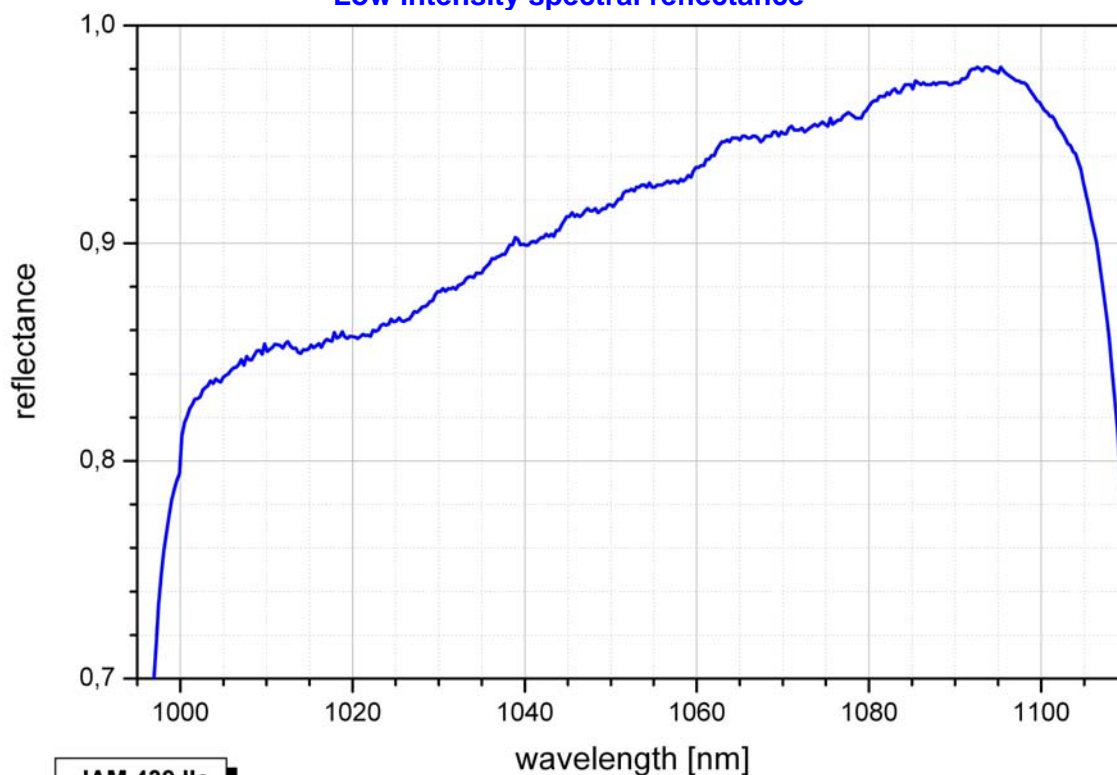


### SAM™ data sheet SAM-1064-5-x-5ps, $\lambda = 1064 \text{ nm}$

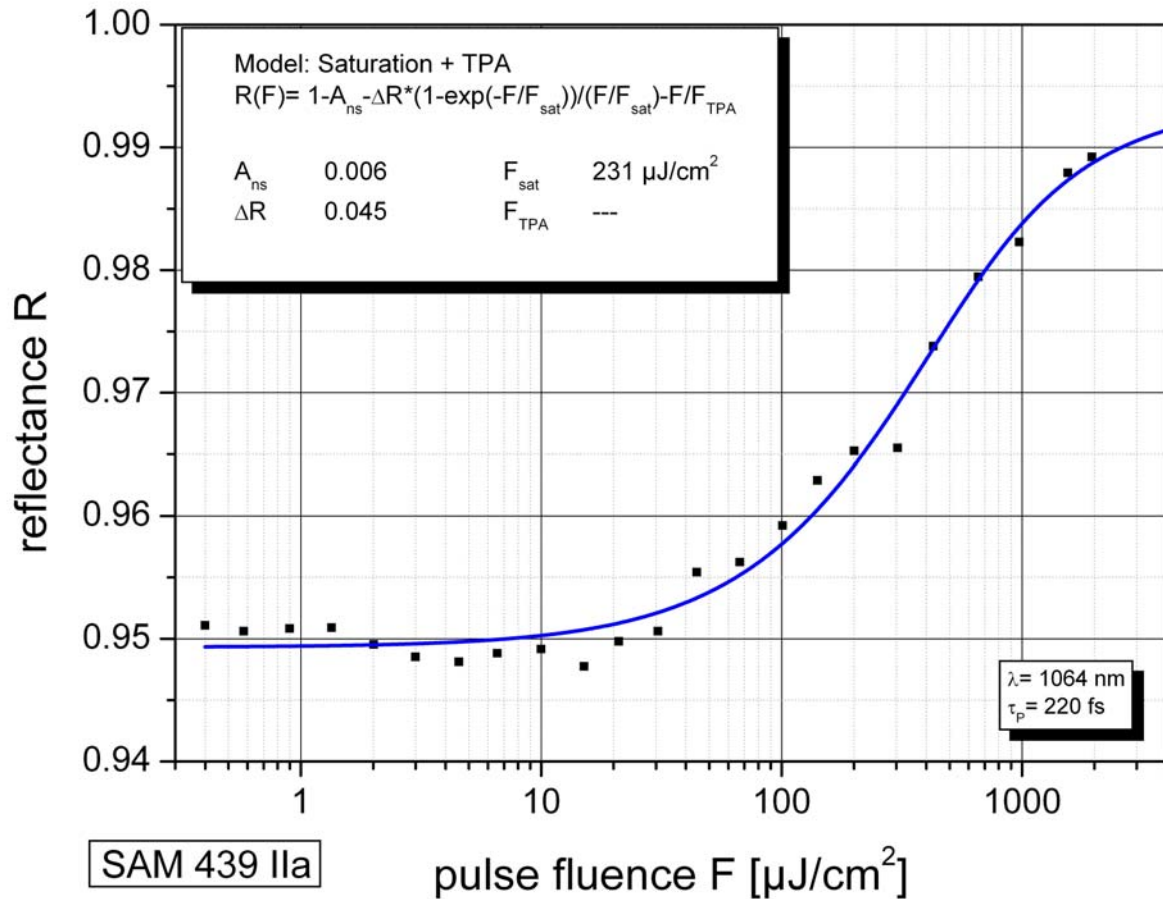
Laser wavelength	$\lambda = 1064 \text{ nm}$
High reflection band (R > 85%)	$\lambda = 1010 \dots 1090 \text{ nm}$
Absorbance	$A_0 = 5 \%$
Modulation depth	$\Delta R = 3.5 \%$
Non-saturable loss	$A_{ns} = 1.5 \%$
Saturation fluence	$\Phi_{sat} = 231 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 5 \text{ ps}$
Damage threshold	$800 \text{ MW}/\text{cm}^2$
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-5ps	denotes the type of mounting as follows:
<b>x = 0</b>	unmounted
<b>x = 12.7 g</b>	glued on a gold plated Cu-cylinder with 12.7 mm $\varnothing$
<b>x = 25.4 g</b>	glued on a gold plated Cu-cylinder with 25.4 mm $\varnothing$
<b>x = 12.7 s</b>	soldered on a gold plated Cu-cylinder with 12.7 mm $\varnothing$
<b>x = 25.4 s</b>	soldered on a gold plated Cu-cylinder with 25.4 mm $\varnothing$
<b>x = 25.0 w</b>	soldered on a water cooled Cu-cylinder with 25.4 mm $\varnothing$
<b>x = FC</b>	mounted on a 1 m monomode fiber cable with FC connector

#### Low intensity spectral reflectance



JAM 439 IIa

### Saturation measurement



Remark: the absolute accuracy of the measured reflectance values is not better than ~ 1 %

Pump-probe measurement

