

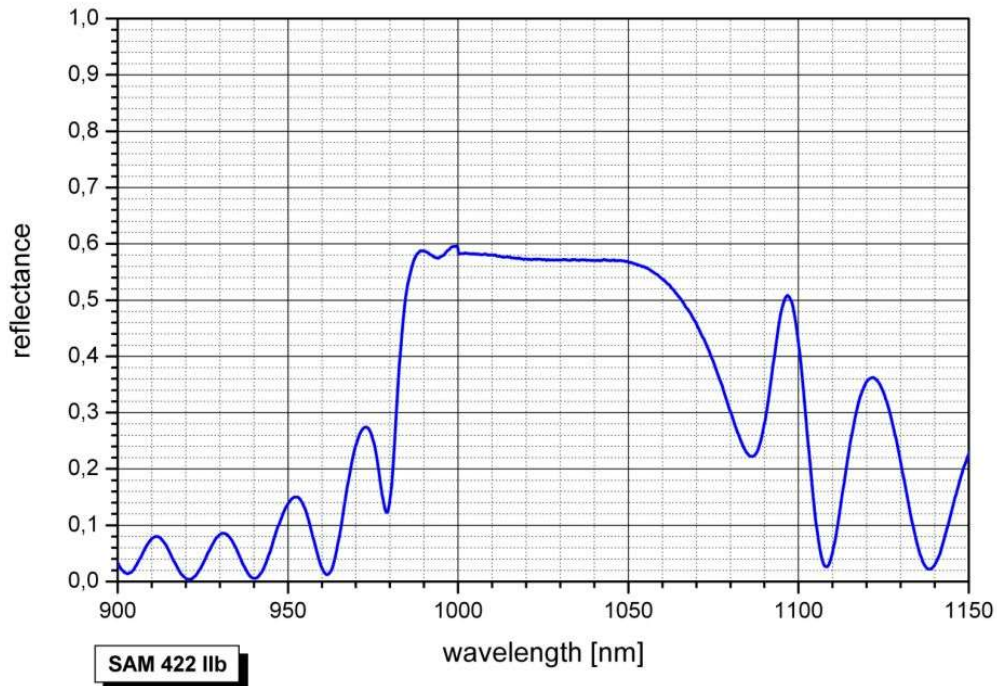
## SAM™ Data Sheet SAM-1040-40-9ps-x, $\lambda = 1040 \text{ nm}$

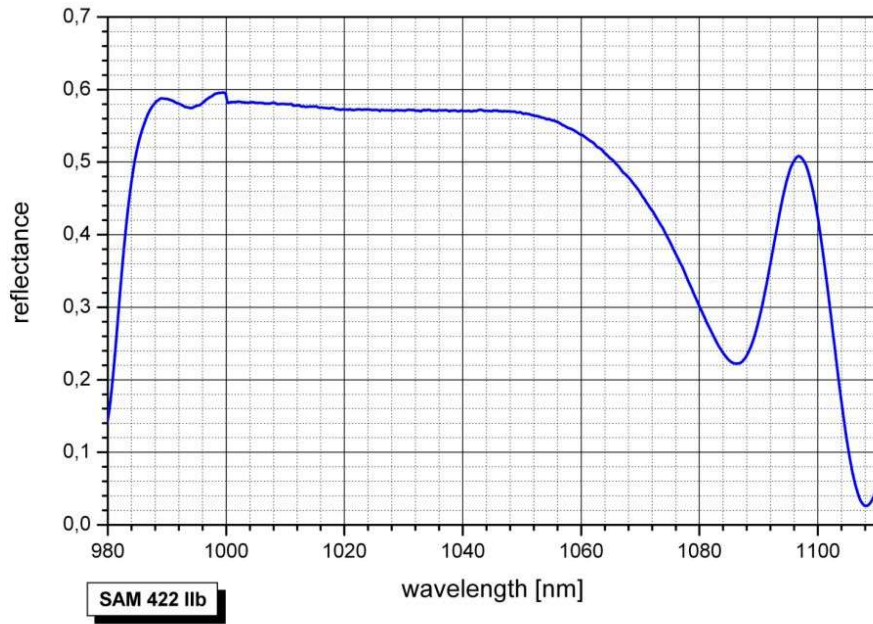
Laser wavelength	$\lambda = 1040 \text{ nm}$
High reflection band	$\lambda = 990 \dots 1064 \text{ nm}$
Absorptance	$A_0 = 40 \%$
Modulation depth	$\Delta R = 29 \%$
Non-saturable loss	$A_{ns} = 11 \%$
Saturation fluence	$\Phi_{sat} = 90 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 9 \text{ ps}$
Damage threshold	$\Phi = 1 \text{ mJ}/\text{cm}^2$
Chip area	4.0 mm x 4.0 mm; other dimensions on request
Chip thickness	450 $\mu\text{m}$
Protection	the SAM is protected with a dielectric front layer

Mounting option **x** denotes the type of mounting as follows:

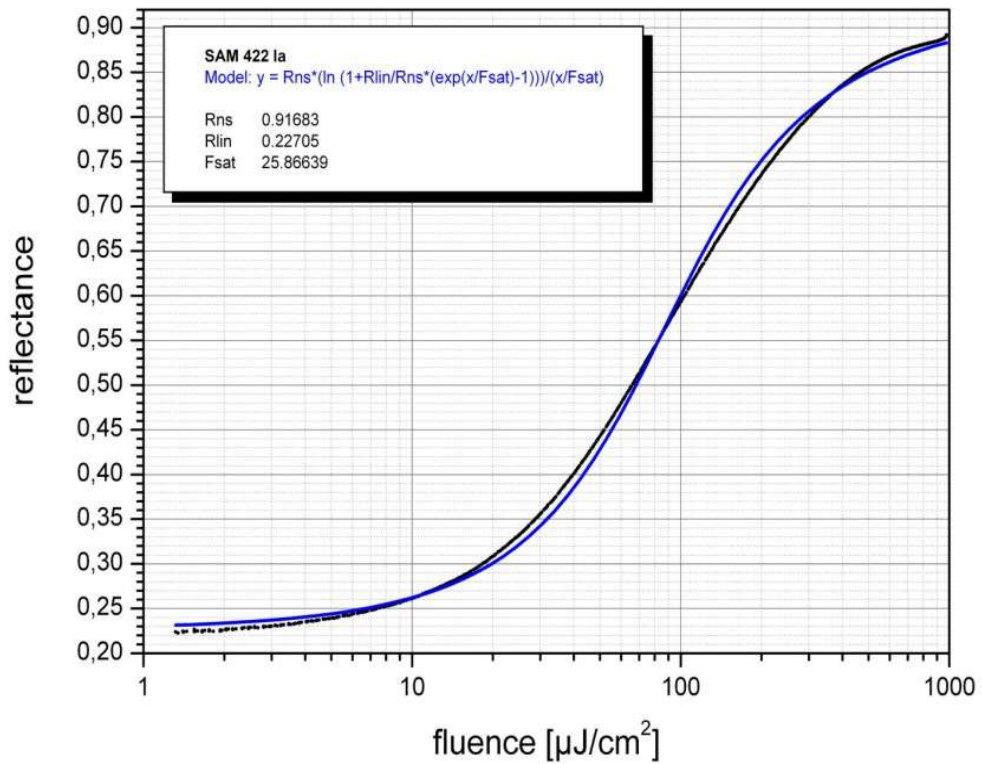
<b>x</b> = 0	unmounted
<b>x</b> = 12.7 g	glued on a gold plated Cu-cylinder with 12.7 mm $\varnothing$
<b>x</b> = 25.4 g	glued on a gold plated Cu-cylinder with 25.4 mm $\varnothing$
<b>x</b> = 12.7 s	soldered on a gold plated Cu-cylinder with 12.7 mm $\varnothing$
<b>x</b> = 25.4 s	soldered on a gold plated Cu-cylinder with 25.4 mm $\varnothing$
<b>x</b> = FC	mounted on a 1 m monomode fiber cable with FC connector

### Low intensity spectral reflectance





**Saturation measurement of a SAM-1040-80 from the same wafer**



**Relaxation of a SAM-1040-80 from the same wafer, pump-probe measurement**

