

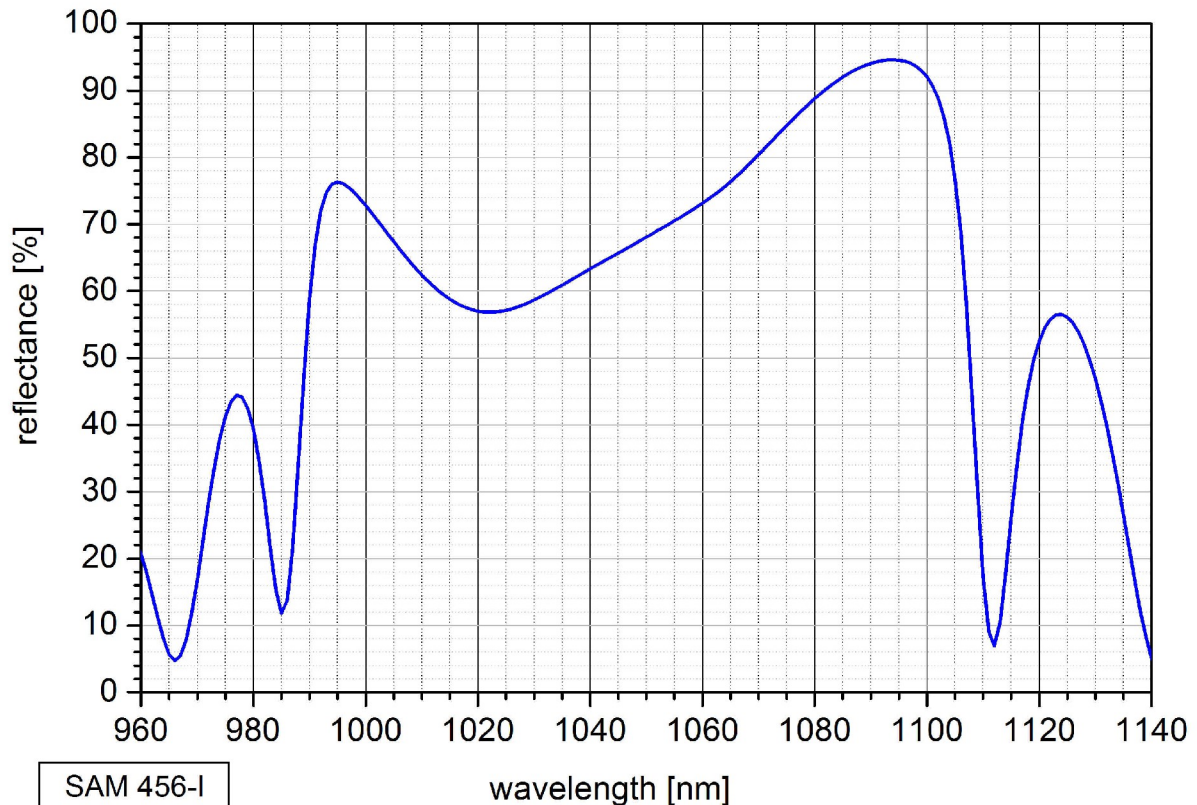
### SAM™ Data Sheet SAM-1040-35-9ps-x, $\lambda = 1040 \text{ nm}$

Laser wavelength	$\lambda = 1040 \text{ nm}$
High reflection band (R > 55%)	$\lambda = 1000 \dots 1100 \text{ nm}$
Absorbance	$A_0 = 35 \%$
Modulation depth	$\Delta R = 18 \%$
Non-saturable loss	$A_{ns} = 17 \%$
Saturation fluence	$\Phi_{sat} = 20 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 9 \text{ ps}$
Damage threshold	$350 \text{ MW}/\text{cm}^2$
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 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> = 25.0 w	soldered on a water cooled Cu-cylinder with 25.0 mm $\varnothing$
<b>x</b> = FC	mounted on a 1 m monomode fiber cable with FC connector

#### Low intensity spectral reflectance



SAM 456-I

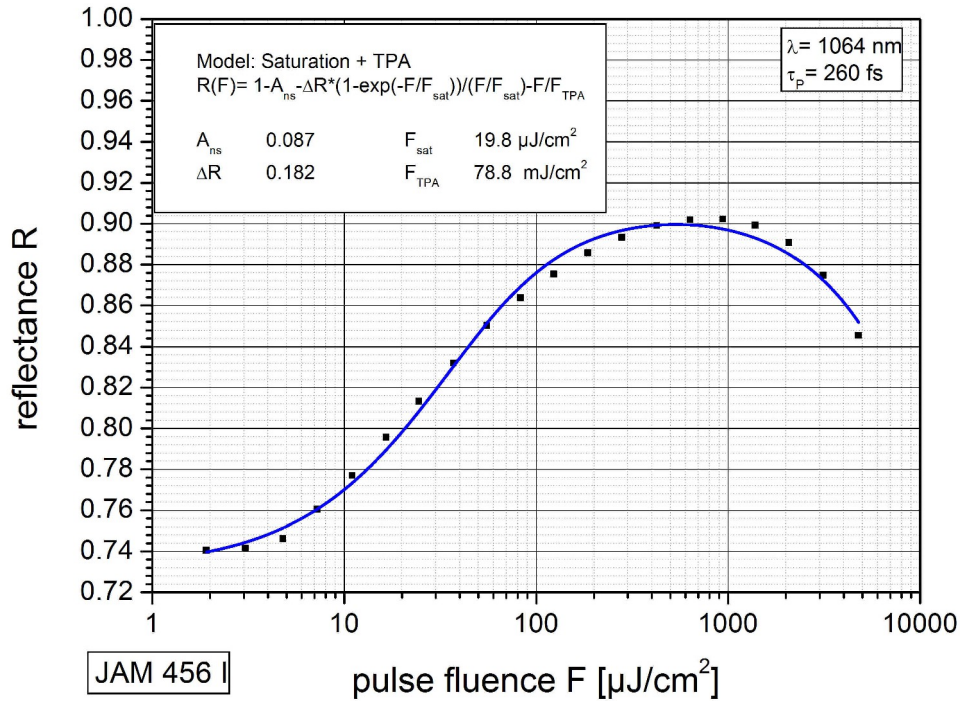
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### Saturation measurement



### Pump-probe measurement

