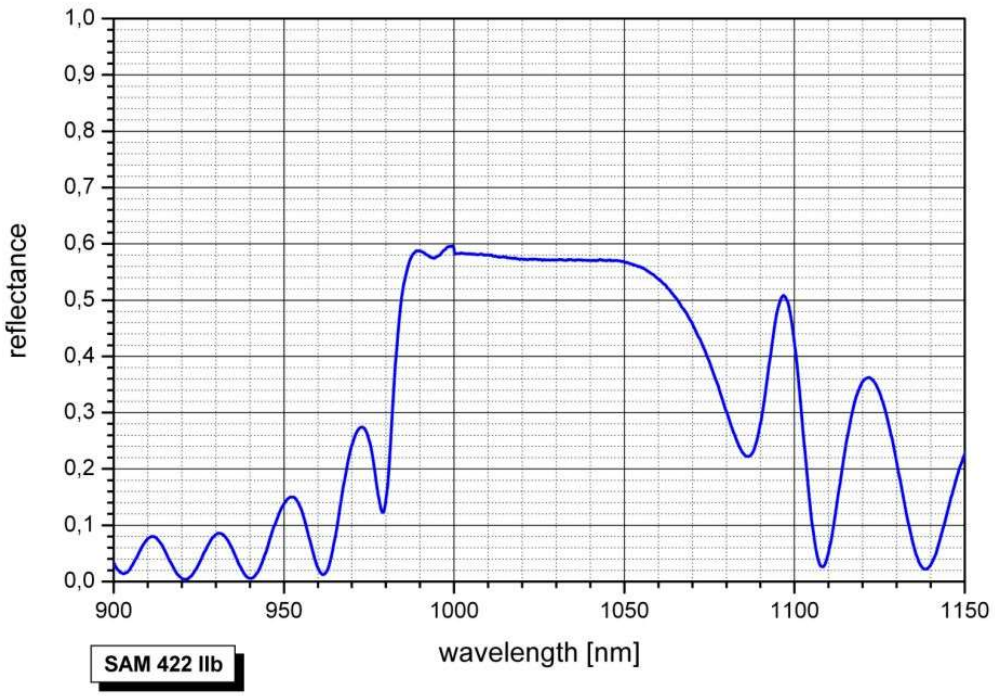
SAM™ Data Sheet SAM-1040-40-9ps-x, λ = 1040 nm

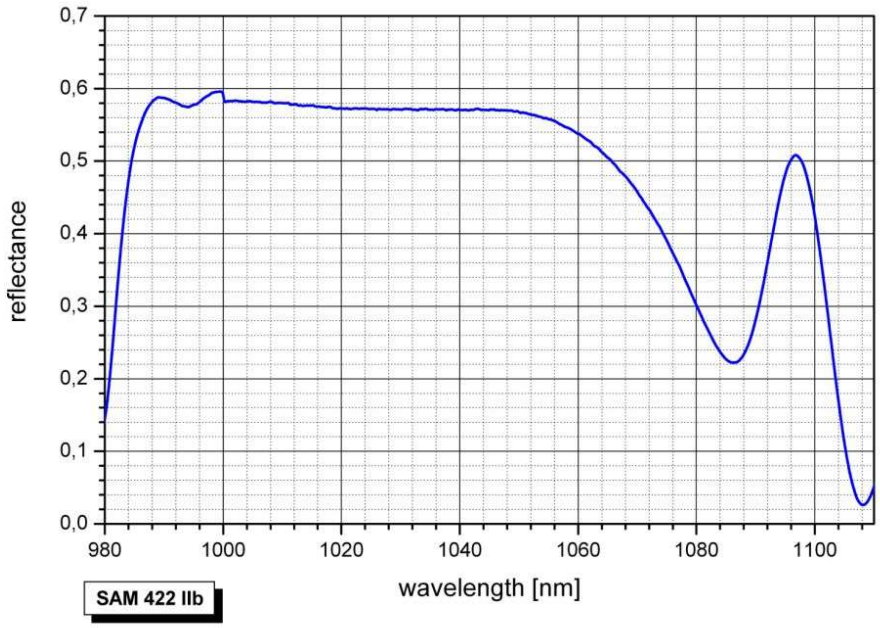
Laser wavelength	λ = 1040 nm
High reflection band	λ = 990 .. 1064 nm
Absorptance	A_0 = 40 %
Modulation depth	ΔR = 29 %
Non-saturable loss	A_{ns} = 11 %
Saturation fluence	Φ_{sat} = 90 µJ/cm^2
Relaxation time constant	τ ~ 9 ps
Damage threshold	Φ = 1 mJ/cm^2
Chip area	4.0 mm x 4.0 mm; other dimensions on request
Chip thickness	450 µm
Protection	the SAM is protected with a dielectric front layer

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

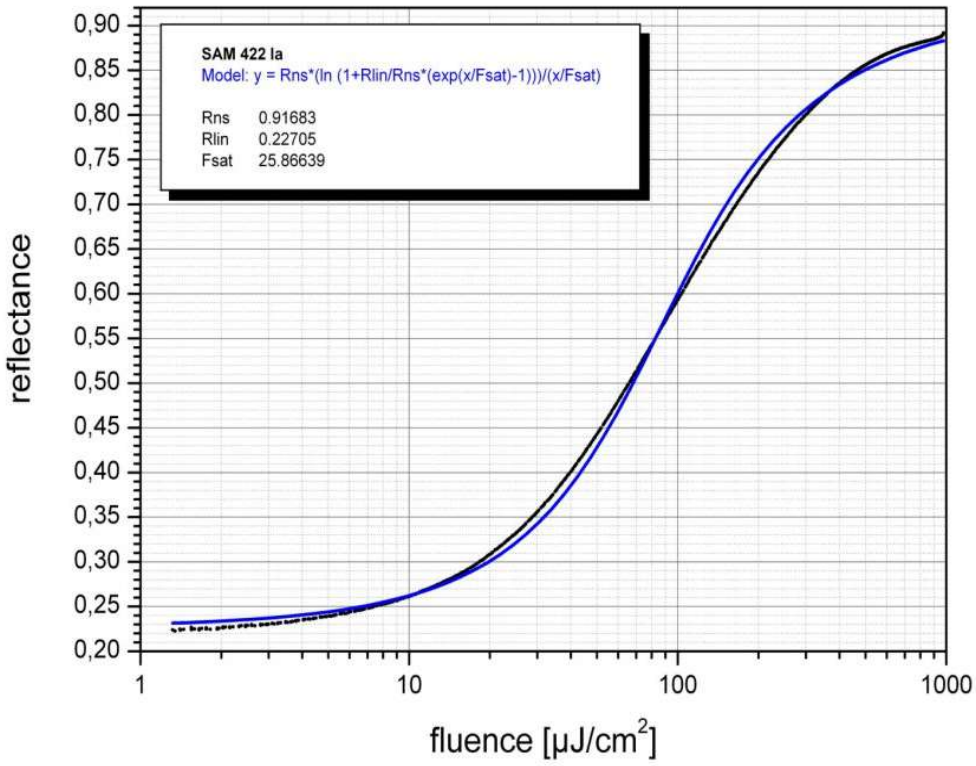
x = 0	unmounted
x = 12.7 g	glued on a gold plated Cu-cylinder with 12.7 mm ∅
x = 25.4 g	glued on a gold plated Cu-cylinder with 25.4 mm ∅
x = 12.7 s	soldered on a gold plated Cu-cylinder with 12.7 mm ∅
x = 25.4 s	soldered on a gold plated Cu-cylinder with 25.4 mm ∅
x = FC	mounted on a 1 m monomode fiber cable with FC connector

Low intensity spectral reflectance

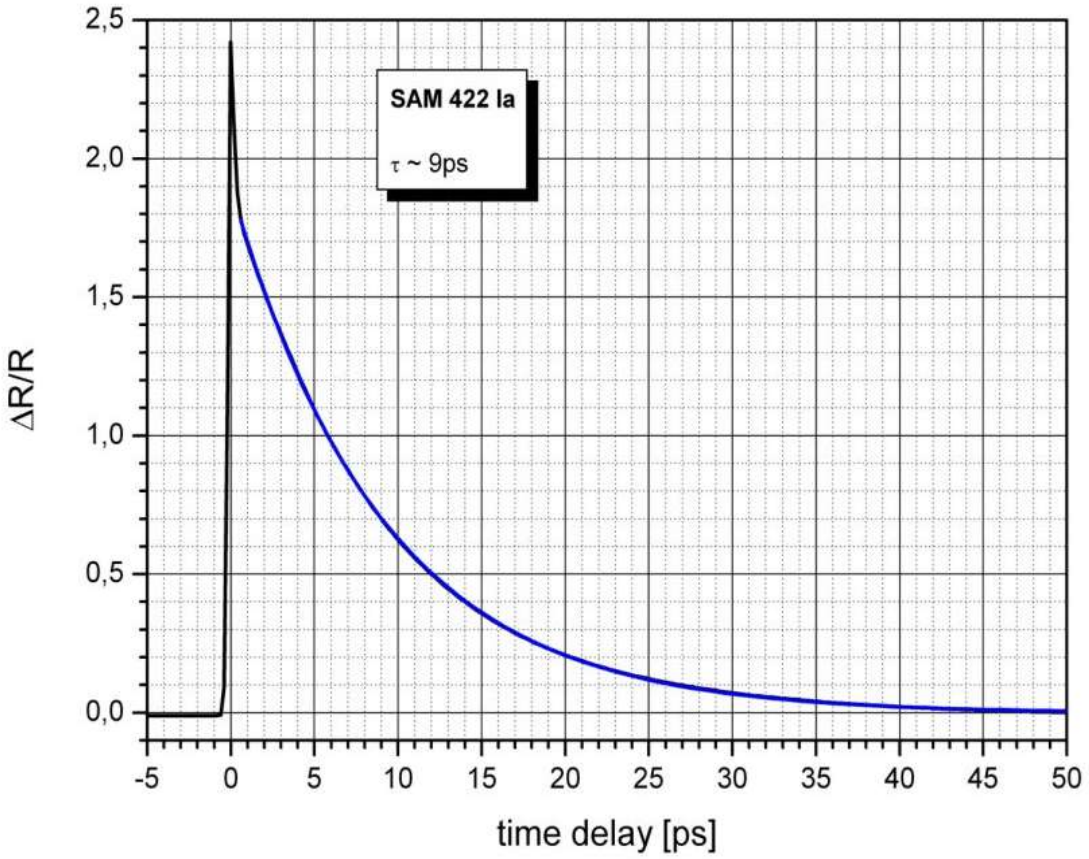




Saturation measurement of a SAM-1040-80 from the same wafer



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


SAM 422 Ia
τ ~ 9ps
ΔR/R
2,5
2,0
1,5
1,0
0,5
0,0
-5
0
5
10
15
20
25
30
35
40
45
50
time delay [ps]