

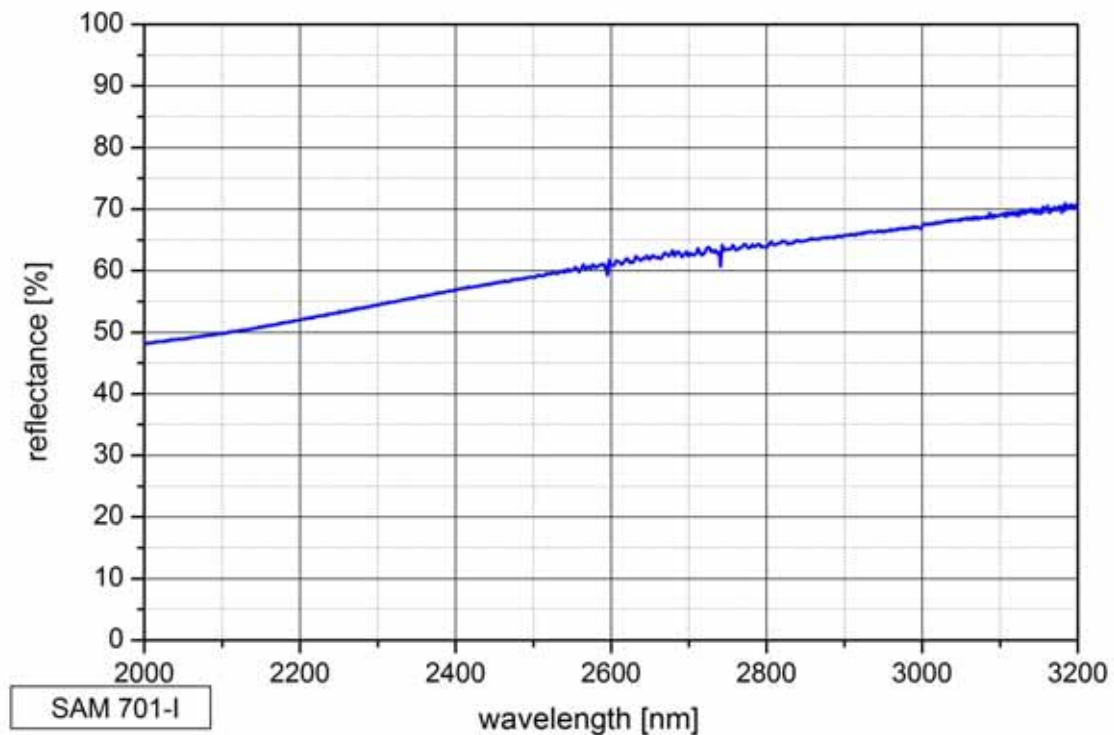
## SAM™ Data Sheet SAM-3000-33-10ps-x, $\lambda = 3000$ nm

Laser wavelength	$\lambda = 3000$ nm
High reflection band (R > 50%)	$\lambda = 2000 \dots 3400$ nm
Absorbance	$A_0 = 33$ %
Modulation depth	$\Delta R = 18$ %
Non-saturable loss	$A_{ns} = 15$ %
Saturation fluence	$\Phi_{sat} = 70$ $\mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 10$ ps
Damage threshold	350 MW/cm <sup>2</sup>
Chip area	4mm x 4mm; other dimensions on request
Chip thickness	625 $\mu\text{m}$
Design	the SAM use a gold mirror the laser beam goes through the AR coated GaAs wafer

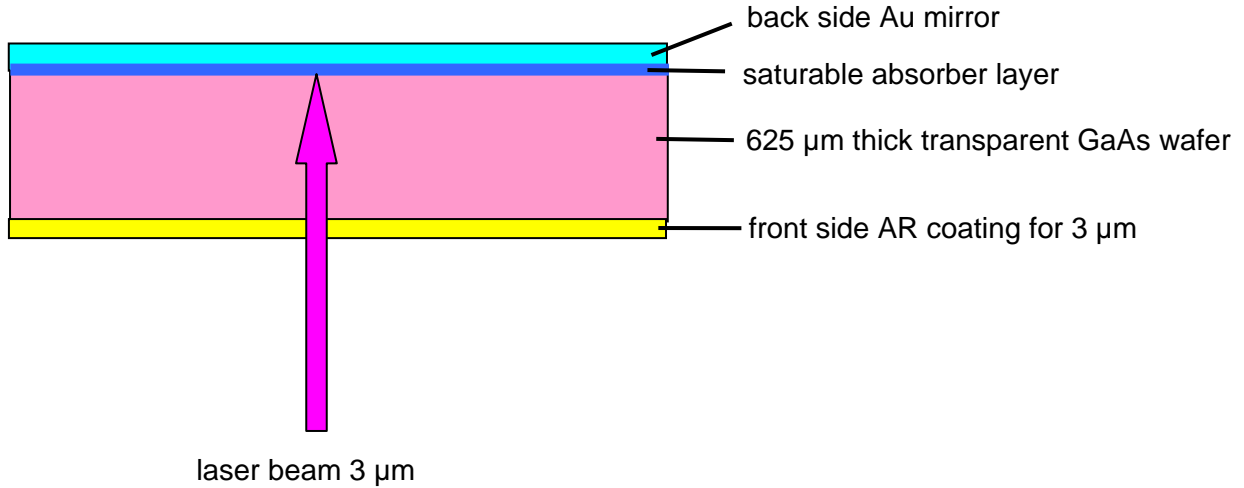
Mounting option **x** denotes the type of mounting as follows:

<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



### Reverse design of the SAM-3000-33-10ps-x



### Pump-Probe relaxation time measurement on a transmission sample without mirror, Laser wavelength 1064 nm

