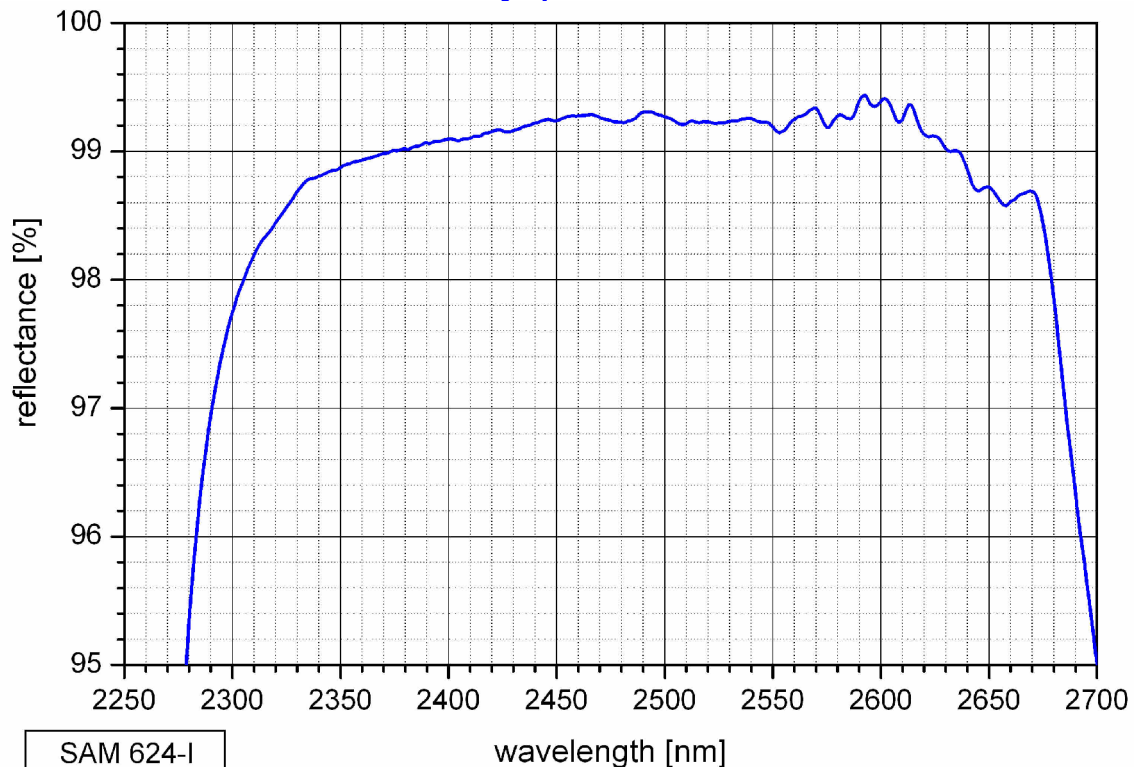


### SAM™ Data Sheet SAM-2400-1-500fs-x, $\lambda = 2400$ nm

Laser wavelength	$\lambda = 2400$ nm
High reflection band (R > 98%)	$\lambda = 2300 .. 2650$ nm
Absorbance	$A_0 = 1$ %
Modulation depth	$\Delta R = 0.6$ %
Non-saturable loss	$A_{ns} = 0.4$ %
Saturation fluence	$\Phi_{sat} = 90$ $\mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 500$ fs
Damage threshold	800 MW/cm <sup>2</sup>
Chip area	4mm x 4mm; other dimensions on request
Chip thickness	620 $\mu\text{m}$
Protection	the SAM is protected with a dielectric AR layer
Reverse design	the absorber layer is illuminated through the 620 $\mu\text{m}$ thick GaAs wafer
Mounting option <b>x</b> denotes the type of mounting as follows:	
<b>x</b> = 0	unmounted
<b>x</b> = 12.7 g	glued on a copper heat sink with 12.7 mm diameter
<b>x</b> = 25.4 g	glued on a copper heat sink with 25.4 mm diameter
<b>x</b> = 12.7 s	soldered on a copper heat sink with 12.7 mm diameter
<b>x</b> = 25.4 s	soldered on a copper heat sink with 25.4 mm diameter
<b>x</b> = 25.0 w	soldered on a water cooled copper heat sink with 25.0 mm diameter

#### Low intensity spectral reflectance



SAM 624-I

## Reverse design of the SAM-2400-1-x-500fs

