

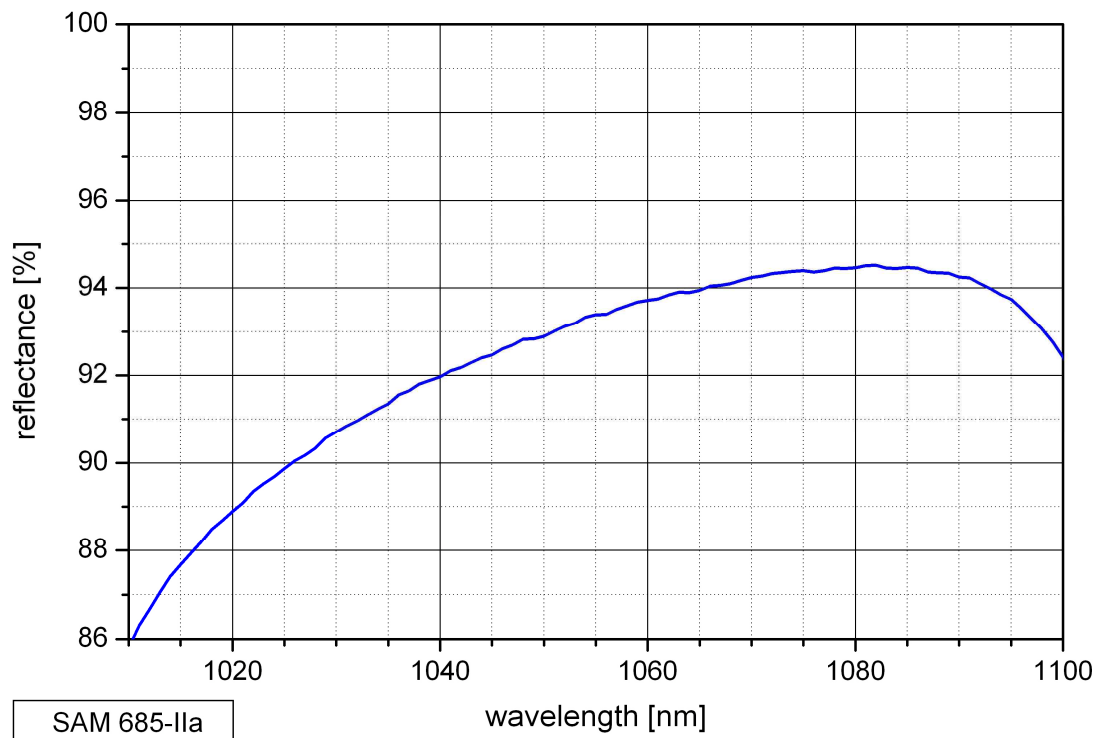
### SAM™ Data Sheet SAM-1040-8-1ps-x, $\lambda = 1040 \text{ nm}$

Laser wavelength	$\lambda = 1040 \text{ nm}$
High reflection band (R > 88%)	$\lambda = 1020 \dots 1100 \text{ nm}$
Absorbance	$A_0 = 8 \%$
Modulation depth	$\Delta R = 5 \%$
Non-saturable loss	$A_{ns} = 3 \%$
Saturation fluence	$\Phi_{sat} = 40 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 1 \text{ ps}$
Damage threshold	$\Phi = 3 \text{ mJ}/\text{cm}^2$
Chip area	4mm x 4mm; other dimensions on request
Chip thickness	450 $\mu\text{m}$ ; 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:

- x** = 0 unmounted
- x** = 12.7 g glued on a copper heat sink with 12.7 mm  $\varnothing$
- x** = 25.4 g glued on a copper heat sink with 25.4 mm  $\varnothing$
- x** = 12.7 s soldered on a copper heat sink with 12.7 mm  $\varnothing$
- x** = 25.4 s soldered on a copper heat sink with 25.4 mm  $\varnothing$
- x** = 25.0 w soldered on a water cooled copper heat sink with 25.0 mm  $\varnothing$
- x** = FC mounted on a 1 m single mode fiber with FC connector

#### Low intensity spectral reflectance



SAM 685-IIa

**Low intensity spectral reflectance and dispersion**

