

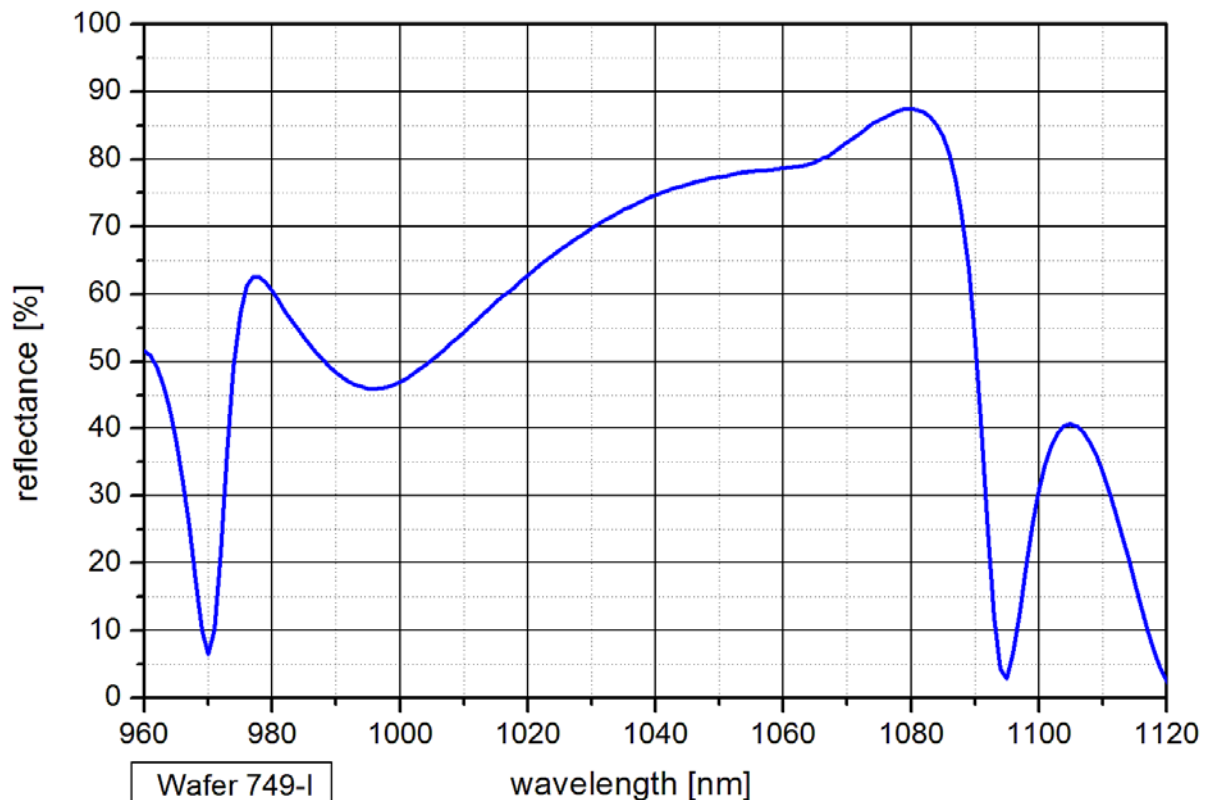
**SAM™ data sheet SAM-1040-27-1ps-x,  $\lambda = 1040$  nm**

|                          |   |
|--------------------------|---|
| Laser wavelength         | $\lambda = 1040$ nm                         |
| Absorbance               | $A_0 = 27$ %                                |
| Modulation depth         | $\Delta R = 11$ %                           |
| Non-saturable loss       | $A_{ns} = 16$ %                             |
| Saturation fluence       | $\Phi_{sat} = 30$ $\mu\text{J}/\text{cm}^2$ |
| Relaxation time constant | $\tau \sim 1$ ps                            |
| Damage threshold         | $\Phi = 3$ $\text{mJ}/\text{cm}^2$          |
| Chip area                | 4mm x 4mm; other dimensions on request      |
| Chip thickness           | 450 $\mu\text{m}$                           |

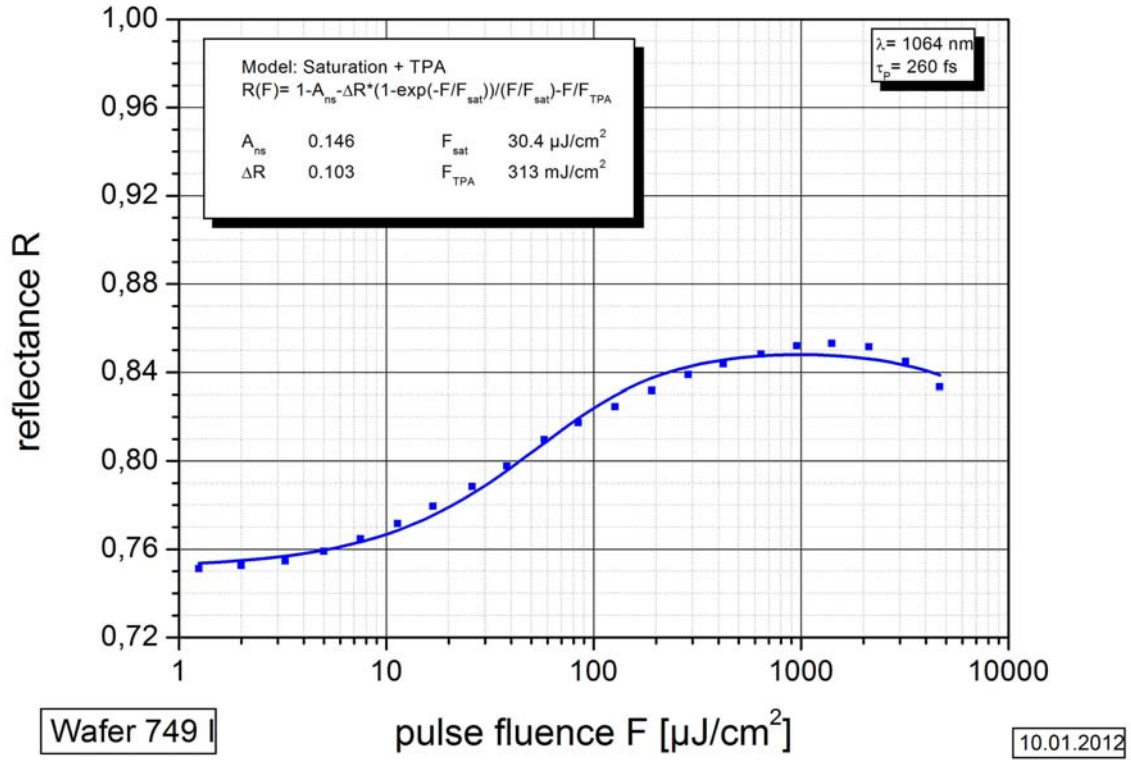
Mounting option **x** denotes the type of mounting as follows:

- 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** = 25.4 w soldered on a water cooled copper heat sink with 25.4 mm  $\varnothing$
- x** = FC mounted on a 1 m single mode fiber cable with FC connector

**Low intensity spectral reflectance**



Saturation measurement without dielectric coating



Pump-probe measurement

