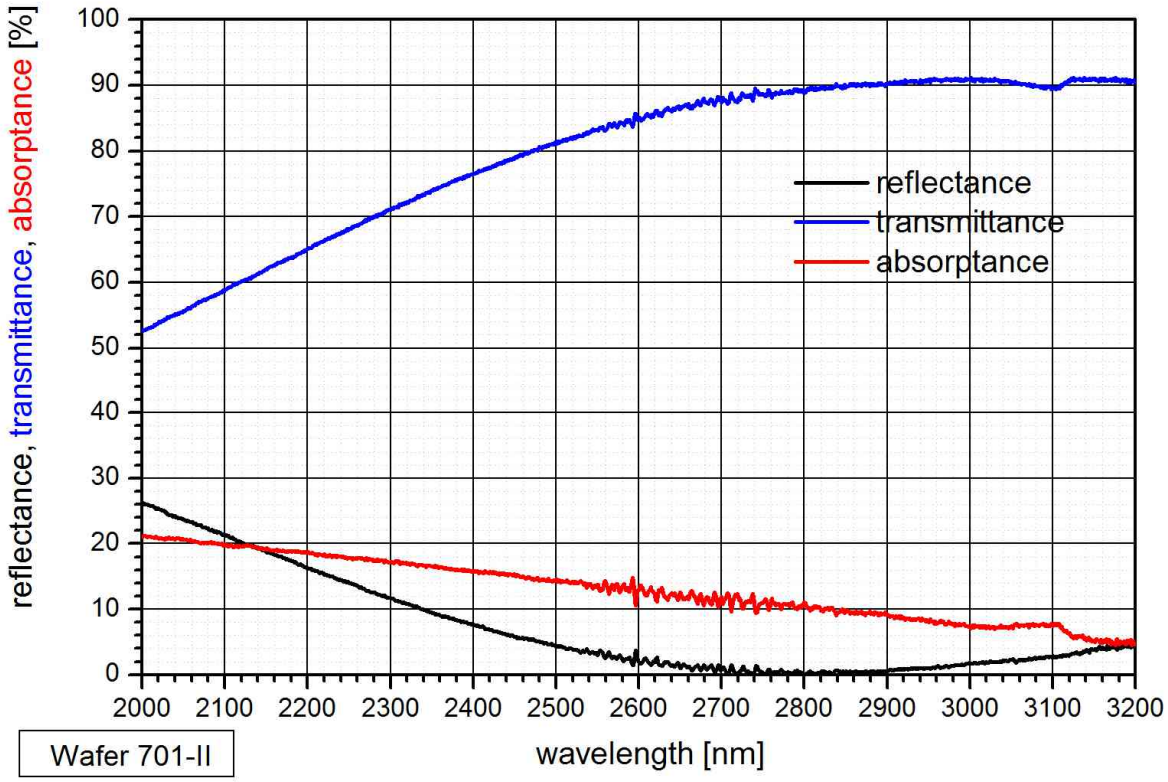
SA data sheet SA-2800-10-x, λ = 2800 nm

Saturable absorber in transmission

Laser wavelength	λ = 2500 nm … 3000 nm
Absorptance	A_0 = 10 % @ 2.8 µm
Transmittance	T_0 = 90 % @ 2.8 µm
Reflectance	R_0 = 0 % @ 2.8 µm
Modulation depth	ΔT = 6 % @ 2.8 µm
Non-saturable loss	A_{ns} = 4 % @ 2.8 µm
Saturation fluence	Φ_{sat} = 300 µJ/cm^2
Damage threshold	Φ = 2 mJ/cm^2
Relaxation time constant	τ ~ 10 ps
Chip area	5 mm x 5 mm; other dimensions on request
Chip thickness	625 µm semi-insulating GaAs
Front side protection	AR coating for 2.8 µm
Back side coating	the SA back side is polished and antireflection coated for 2.8 µm
Mounting of SA-2000-43-**x**	denotes the type of mounting as follows:
x = 0	unmounted
x = 12.7 g	glued on a Cu-cylinder with 12.7 mm ∅ and 4 mm ∅ center hole
x = 25.4 g	glued on a Cu-cylinder with 25.4 mm ∅ and 4 mm ∅ center hole

Spectral low intensity transmittance, reflectance and absorptance



Pump-probe measurement using a 1060 nm pulse laser