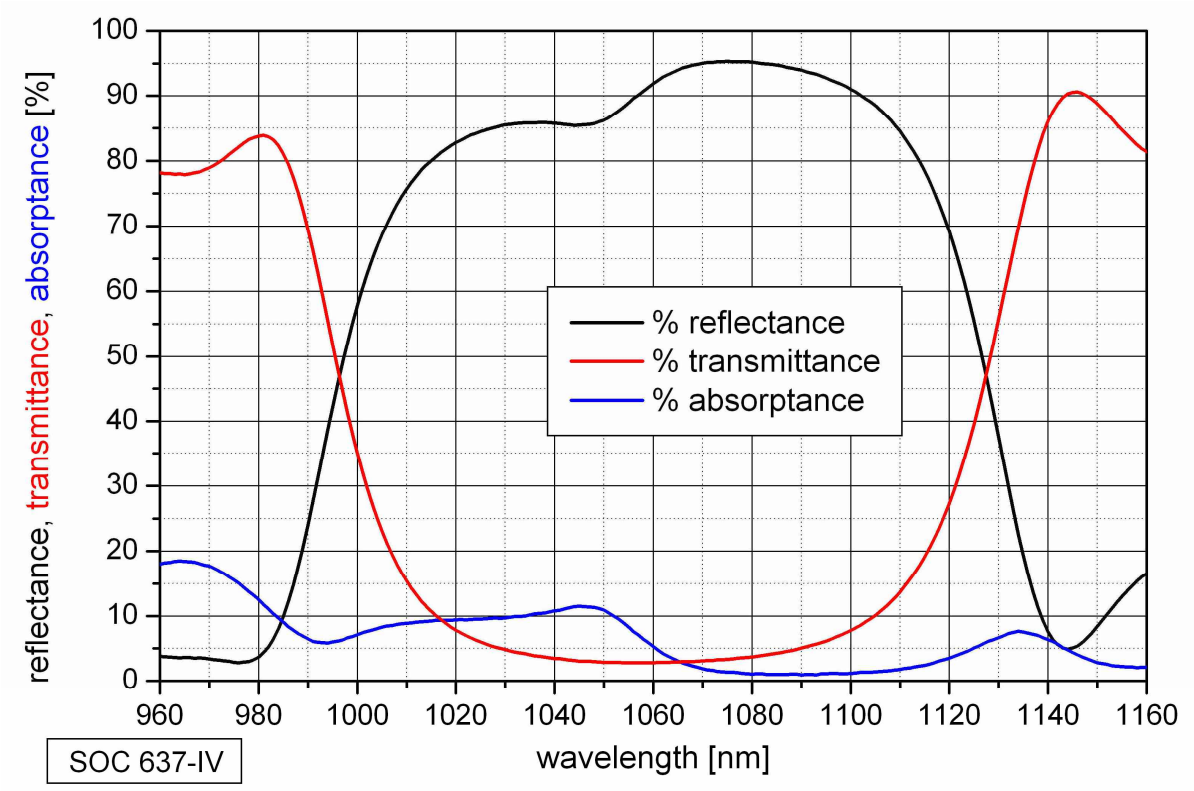
SOC data sheet SOC-1040-11-3-1ps-x, λ = 1040 nm

Laser wavelength	λ = 1040 nm
Absorptance	A_0 = 11 %
Transmittance	T = 3 %
Reflectance	R = 86 %
Modulation depth	ΔR = 6 %
Non-saturable loss	A_{ns} = 5 %
Saturation fluence	Φ_{sat} = 80 µJ/cm^2
Relaxation time constant	τ ~ 1 ps
Chip area	5.0 mm x 5.0 mm; other dimensions on request
Chip thickness	625 µm; semi-insulating GaAs
Front side protection	with a dielectric layer
Back side AR coating	the SOC back side is polished and antireflection coated for 1040 nm

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

x = 0	unmounted
x = 12.7 g	glued on a gilded Cu-cylinder with 12.7 mm ∅ and 4 mm ∅ center hole
x = 25.0 g	glued on a gilded Cu-cylinder with 25. mm ∅ and 4 mm ∅ center hole
x = 25.4 g	glued on a gilded Cu-cylinder with 25.4 mm ∅ and 4 mm ∅ center hole
x = FC	mounted on a 1 m single mode fiber cable with FC connector

Spectral reflectance, transmittance and absorptance



Group Delay Dispersion (GDD)

Dispersion coefficient $D_2(\omega) = \frac{\partial^2 \varphi}{\partial \omega^2}$ *with* φ *- reflected phase*

$\omega = 2\pi \frac{c}{\lambda}$ *- angular frequency*