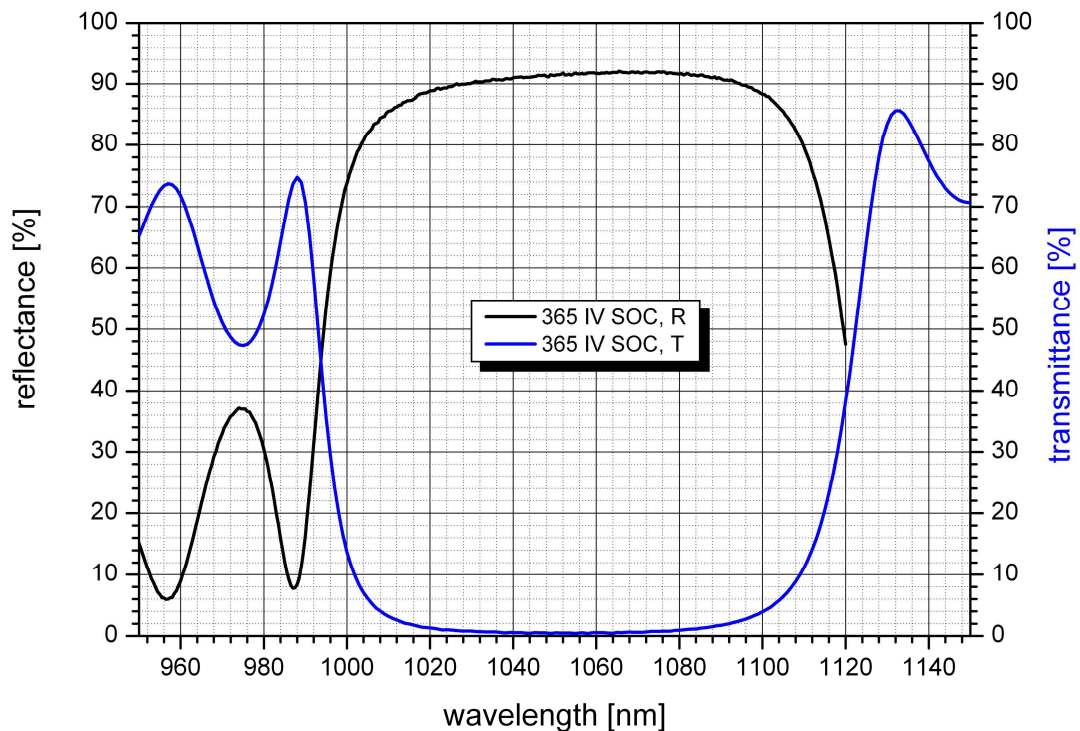


SOC data sheet SOC-1040-8-0.6-1ps-x, $\lambda = 1040$ nm

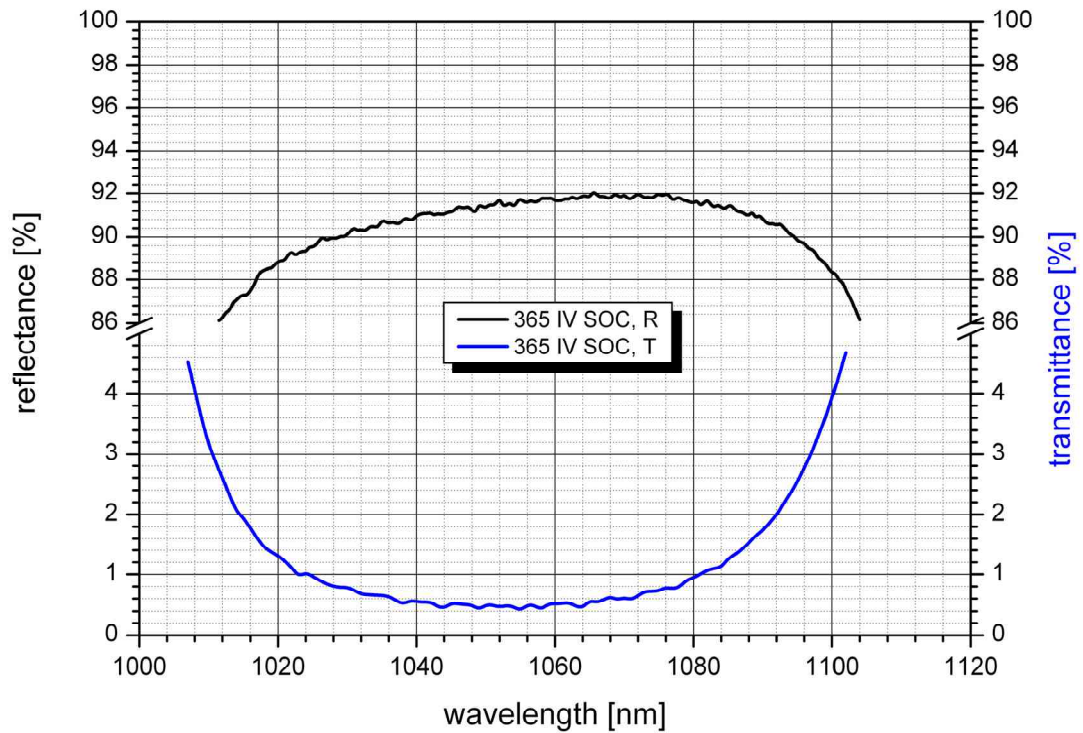
Laser wavelength	$\lambda = 1040$ nm
Absorptance	$A_0 = 8$ %
Transmittance	$T = 0.6$ %
Reflectance	$R = 91$ %
Modulation depth	$\Delta R = 5$ %
Non-saturable loss	$A_{ns} = 3$ %
Saturation fluence	$\Phi_{sat} = 70$ $\mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 1$ ps
Chip area	5.0 mm x 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 1064 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 \varnothing and 4 mm \varnothing center hole
x = 25.0 g	glued on a gilded Cu-cylinder with 25. mm \varnothing and 4 mm \varnothing center hole
x = 25.4 g	glued on a gilded Cu-cylinder with 25.4 mm \varnothing and 4 mm \varnothing center hole
x = FC	mounted on a 1 m single mode fiber cable with FC connector

Spectral reflectance and transmittance



Spectral reflectance and transmittance



Low intensity spectral reflectance and dispersion coefficient D_2

