

SOC data sheet SOC-1040-5-5-1ps-x, λ = 1040 nm

Laser wavelength λ = 1040 nm Absorptance A_0 = 5 % Transmittance 5 % Reflectance R = 90 %

Modulation depth $\Delta R = 3 \%$ Non-saturable loss $A_{ns} = 2 \%$

Saturation fluence $\Phi_{sat} = 70 \mu J/cm^2$

Relaxation time constant $\tau \sim 1 \text{ ps}$

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

Spectral reflectance and transmittance

