

SOC data sheet SOC-1040-3-4-1ps-x, $\lambda = 1040 \text{ nm}$

Laser wavelength	$\lambda = 1040 \text{ nm}$
Absorptance	$A_0 = 3 \%$
Transmittance	$T = 4 \%$
Reflectance	$R = 93 \%$
Modulation depth	$\Delta R = 1.8 \%$
Non-saturable loss	$A_{\text{ns}} = 1.2 \%$
Saturation fluence	$\Phi_{\text{sat}} = 80 \mu\text{J}/\text{cm}^2$
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 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 \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, **transmittance** and **absorptance**

