SOC – saturable output coupler

product overview

- for passive mode-locking of solid state lasers and use as laser output element

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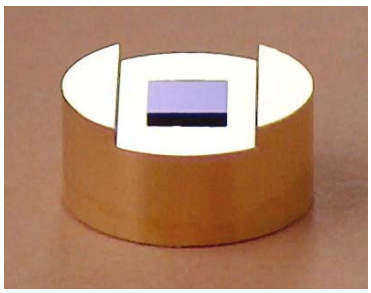
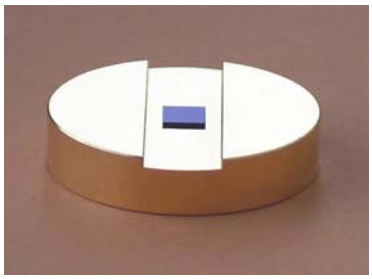
SOC 1040	laser wavelength	λ = 1040 nm
	absorptance	A_0 = 1 - 17 %
	modulation depth	ΔR = 0.6 - 10 %
	transmittance	T = 0.4 – 9 %
	relaxation time	τ = 1 ps
	saturation fluence	Φ_{sat} = 70 µJ/cm^2
SOC 1064	laser wavelength	λ = 1064 nm
	absorptance	A_0 = 0.8 - 15 %
	modulation depth	ΔR = 0.5 - 8 %
	transmittance	T = 0.3 – 23 %
	relaxation time	τ = 1 - 17 ps
	saturation fluence	Φ_{sat} = 70 µJ/cm^2
SOC 2000	laser wavelength	λ = 2000 nm
	absorptance	A_0 = 26 - 40 %
	modulation depth	ΔR = 15 - 23 %
	transmittance	T =19 - 28 %
	relaxation time	τ ~ 1 ps
	saturation fluence	Φ_{sat} = 70 µJ/cm^2

Other wavelengths and parameters on request.

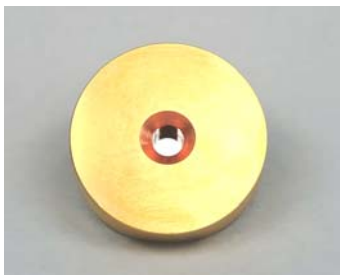
mounting types



12.7 mm ∅ - Cu-Mount with ∅ 4 mm hole



25.0 mm / 25.4 mm ∅ - Cu-Mount with ∅ 4 mm hole



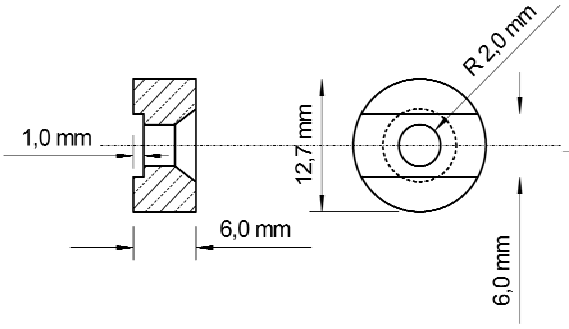
backside of 25.0 mm / 25.4 mm ∅ - Cu-Mount with ∅ 4 mm hole

fiber coupled SOC

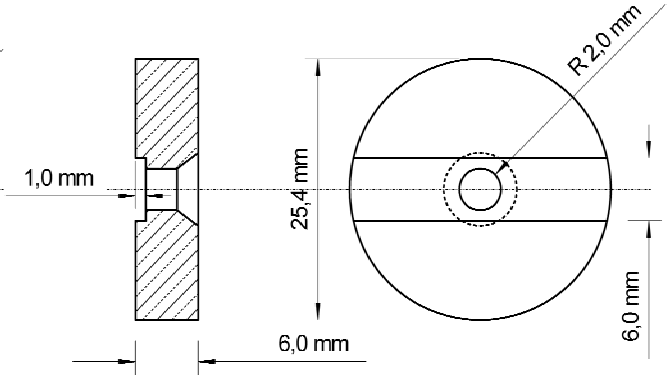
Chip area:	5 mm x 5 mm
Chip thickness:	625 µm, semi – insulating GaAs
Front side coating:	dielectric protection layer
Back side:	polished and AR coated

Mounting:	▪ unmounted
	▪ glued on:
	  ▪ 12.7 mm ∅ Cu-mount with ∅ 4 mm hole
	  ▪ 25.0 mm ∅ Cu-mount with ∅ 4 mm hole
	  ▪ 25.4 mm ∅ Cu-mount with ∅ 4 mm hole
	▪ fiber coupled (SMF, PM)
	▪ mounting on custom mounts on request

Cu-Mount ∅ 12.7 mm with ∅ 4 mm hole:



Cu-Mount ∅ 25.4 mm with ∅ 4 mm hole:



Spectral reflection / transmission:

SOC 2000-40-X