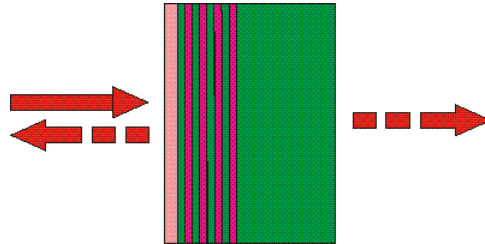


SOC – Saturable Output Coupler

Product Overview

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

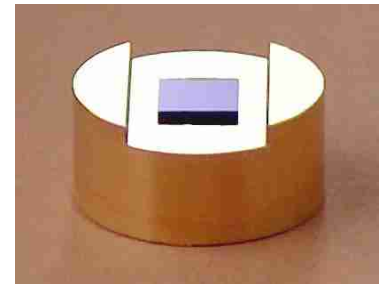


SOC 1040	Laser wavelength	$\lambda = 1020 - 1080 \text{ nm}$
	Absorptance	$A_0 = 2 - 24 \%$
	Modulation depth	$\Delta R = 1.2 - 9.5 \%$
	Transmittance	$T = 0.4 - 19 \%$
	Relaxation time	$\tau = 1 - 15 \text{ ps}$
	Saturation fluence	$\Phi_{\text{sat}} = 40 - 90 \mu\text{J}/\text{cm}^2$

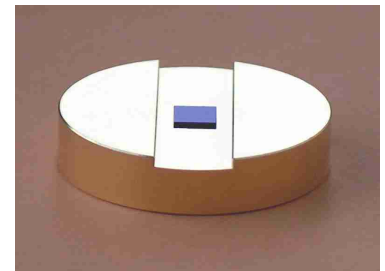
SOC 1064	Laser wavelength	$\lambda = 1040 - 1100 \text{ nm}$
	Absorptance	$A_0 = 1 - 22 \%$
	Modulation depth	$\Delta R = 0.6 - 9.5 \%$
	Transmittance	$T = 0.3 - 23 \%$
	Relaxation time	$\tau = 1 - 20 \text{ ps}$
	Saturation fluence	$\Phi_{\text{sat}} = 40 - 500 \mu\text{J}/\text{cm}^2$

SOC 2000	Laser wavelength	$\lambda = 1950 - 2050 \text{ nm}$
	Absorptance	$A_0 = 26 - 40 \%$
	Modulation depth	$\Delta R = 15 - 23 \%$
	Transmittance	$T = 19 - 28 \%$
	Relaxation time	$\tau \sim 10 \text{ ps}$
	Saturation fluence	$\Phi_{\text{sat}} = 70 - 80 \mu\text{J}/\text{cm}^2$

Mounting Options



12.7 mm \varnothing - Cu-Mount with
 \varnothing 4 mm hole



25.0 mm / 25.4 mm \varnothing - Cu-Mount
with \varnothing 4 mm hole



Backside of 25.0 mm / 25.4 mm
 \varnothing - Cu-Mount with \varnothing 4 mm hole

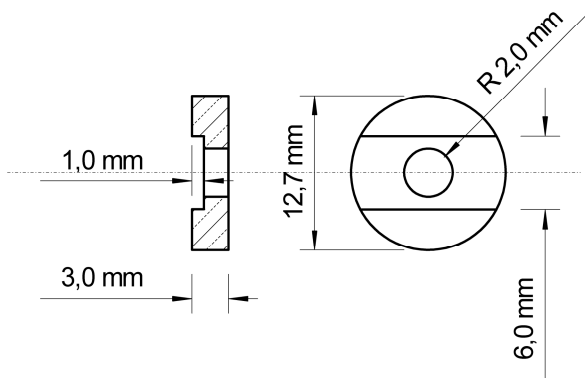


Fiber coupled SOC

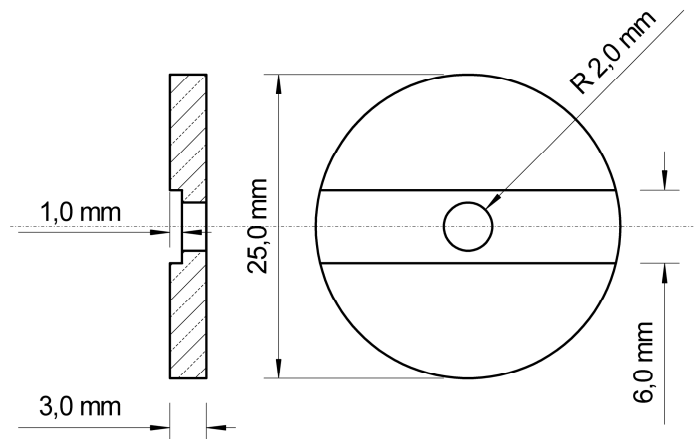
Other wavelengths and parameters on request.

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:	<ul style="list-style-type: none"> ▪ Unmounted ▪ Glued on: <ul style="list-style-type: none"> ▪ 12.7 mm \varnothing Cu-mount with \varnothing 4 mm hole ▪ 25.0 mm \varnothing Cu-mount with \varnothing 4 mm hole ▪ 25.4 mm \varnothing Cu-mount with \varnothing 4 mm hole ▪ Fiber coupled (SMF, PM) ▪ Mounting on custom mounts on request

Cu-Mount \varnothing 12.7 mm with \varnothing 4 mm hole:

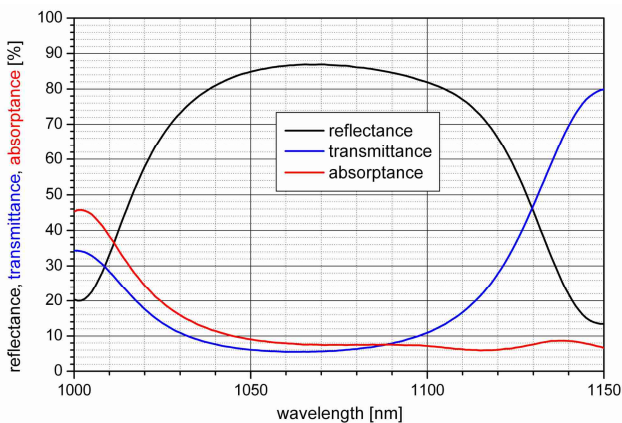


Cu-Mount \varnothing 25.4 mm with \varnothing 4 mm hole:



Spectral reflection / transmission:

SOC-1064-8-6-1ps-X



SOC-2000-40-28-1ps-X

