

SOC – saturable output coupler

product overview

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

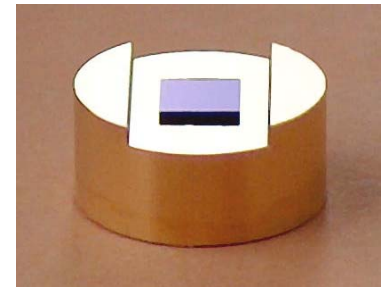
SOC 1040	laser wavelength	$\lambda = 1040 \text{ nm}$
	absorptance	$A_0 = 1 - 8 \%$
	modulation depth	$\Delta R = 0.6 \% - 5 \%$
	transmittance	$T = 0.4 - 4 \%$
	relaxation time	$\tau \leq 10 \text{ ps}$
	saturation fluence	$\Phi_{\text{sat}} = 70 \mu\text{J}/\text{cm}^2$

SOC 1064	laser wavelength	$\lambda = 1064 \text{ nm}$
	absorptance	$A_0 = 0.8 - 7 \%$
	modulation depth	$\Delta R = 0.5 \% - 4 \%$
	transmittance	$T = 0.3 - 3.2 \%$
	relaxation time	$\tau \leq 3 \text{ ps}$
	saturation fluence	$\Phi_{\text{sat}} = 70 \mu\text{J}/\text{cm}^2$

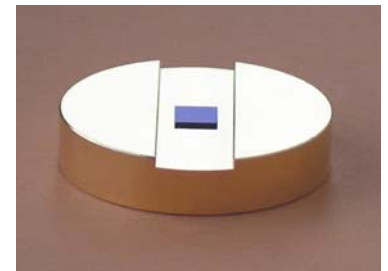
Chip area:	5 mm x 5 mm
Chip thickness:	625 μm , semi – insulating GaAs
Front side coating:	dielectric protection layer
Back side:	polished and AR coated
Mount:	<ul style="list-style-type: none">▪ unmounted▪ 12.7 mm \varnothing▪ 25.0 mm \varnothing▪ 25.4 mm \varnothing▪ fiber coupled (SMF, PM)

Other wavelengths and parameters on request.

mounting types



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

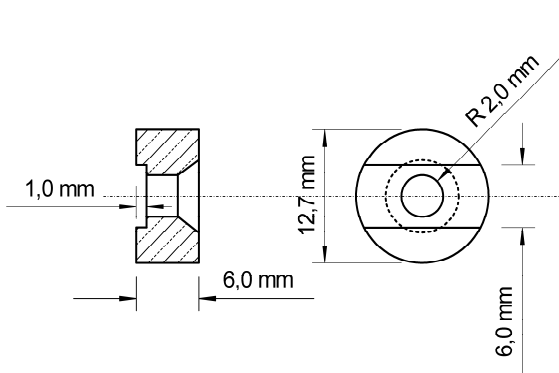


backside of 25.0 mm / 25.4 mm \varnothing - Cu-Mount with \varnothing 4 mm hole

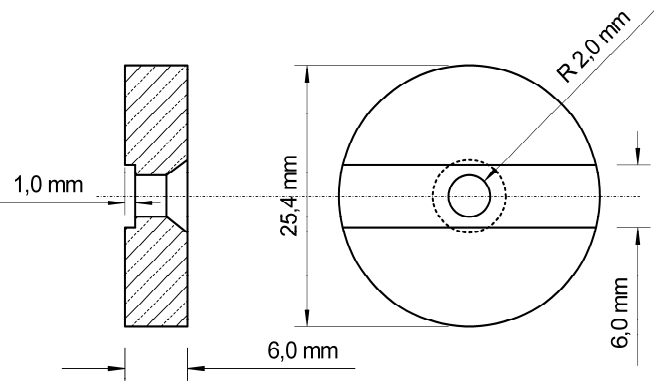


fiber coupled SOC

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

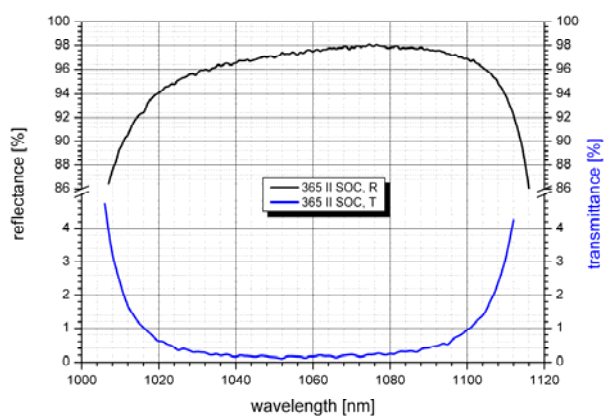
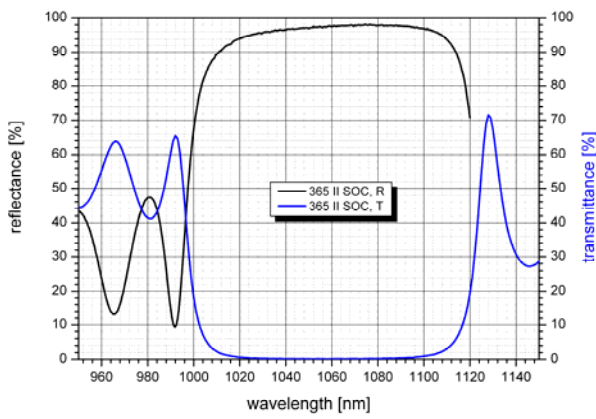


Cu-Mount \varnothing 25.4 mm with \varnothing 4 mm hole:

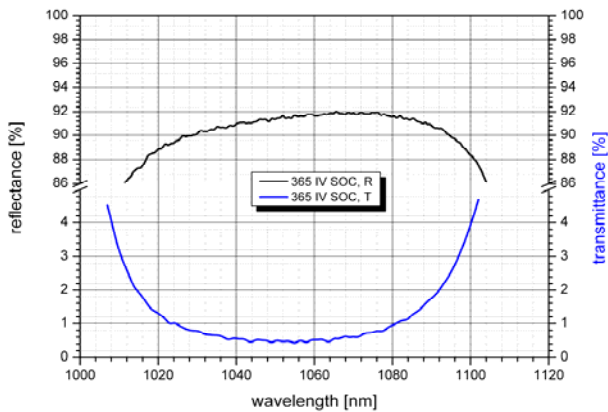
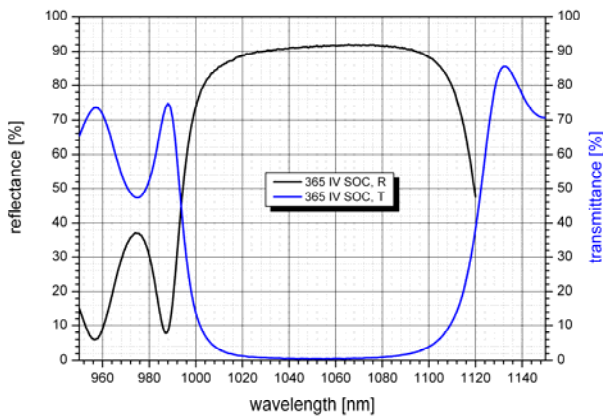


Spectral reflection / transmission:

SOC 1040-3-X



SOC 1040-8-X



SOC 1064-4-X

