

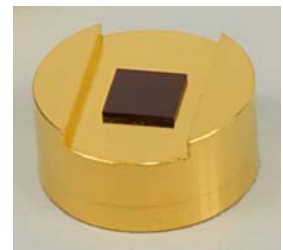
# SA – saturable absorber

## product overview

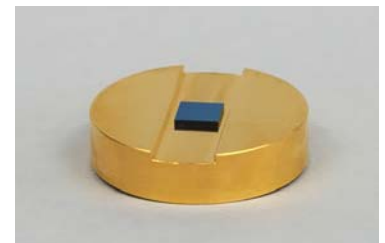
- saturable absorber for use in transmission applications
- for passive mode-locking of solid state, ring or fiber ring lasers

<b>SA 1020</b>	laser wavelength absorptance modulation depth relaxation time saturation fluence	$\lambda = 980 \text{ nm} - 1040 \text{ nm}$ $A_0 = 40 \%$ $\Delta T = 25 \%$ $\tau \sim 500 \text{ fs}$ $\Phi_{\text{sat}} = 300 \mu\text{J}/\text{cm}^2$
<b>SA 1064</b>	laser wavelength absorptance modulation depth relaxation time saturation fluence	$\lambda = 1030 \text{ nm} - 1090 \text{ nm}$ $A_0 = 40 \%$ $\Delta T = 25 \%$ $\tau \sim 500 \text{ fs}$ $\Phi_{\text{sat}} = 300 \mu\text{J}/\text{cm}^2$
<b>SA 1550</b>	laser wavelength absorptance modulation depth relaxation time saturation fluence	$\lambda = 1500 \text{ nm} - 1600 \text{ nm}$ $A_0 = 25 \%$ $\Delta T = 15 \%$ $\tau \sim 2 \text{ ps}$ $\Phi_{\text{sat}} = 300 \mu\text{J}/\text{cm}^2$
<b>SA 2000</b>	laser wavelength absorptance modulation depth relaxation time saturation fluence	$\lambda = 1900 \text{ nm} - 2100 \text{ nm}$ $A_0 = 1 \%$ $\Delta T = 0.6 \%$ $\tau \sim 500 \text{ fs}$ $\Phi_{\text{sat}} = 300 \mu\text{J}/\text{cm}^2$

## mounting types



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



25.0 mm  $\varnothing$  - Cu-Mount with  
 $\varnothing$  4 mm hole



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



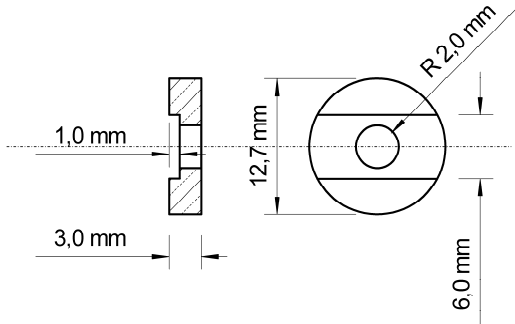
fiber coupled SA



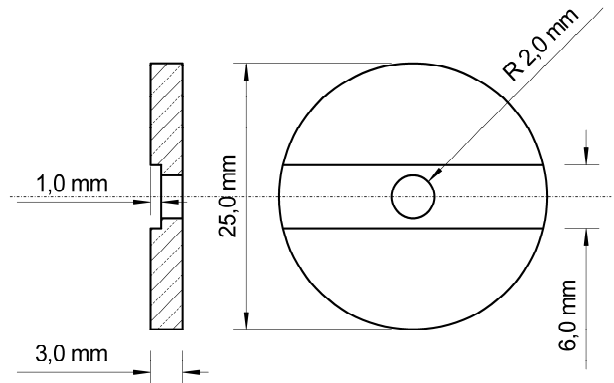
Other wavelengths and parameters on request.

- Chip area: 5 mm x 5 mm  
 Chip thickness: 625  $\mu\text{m}$  semi – insulating GaAs,  
 other thickness on request  
 Front side protection: AR coating  
 Back side: polished and AR coated  
 Mount:
  - unmounted
  - 12.7 mm  $\varnothing$
  - 25.0 mm  $\varnothing$
  - fiber coupled (SMF, PM)

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

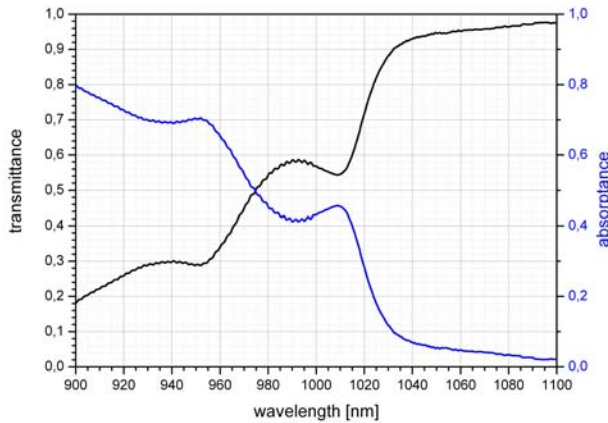


Cu-Mount  $\varnothing$  25.0 mm with  $\varnothing$  4 mm hole:

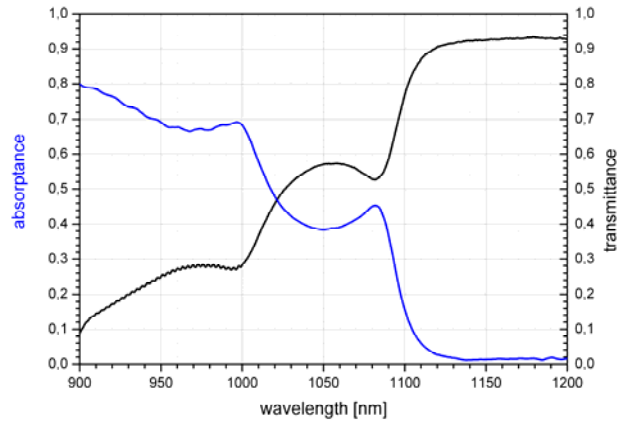


**Spectral transmission / absorption:**

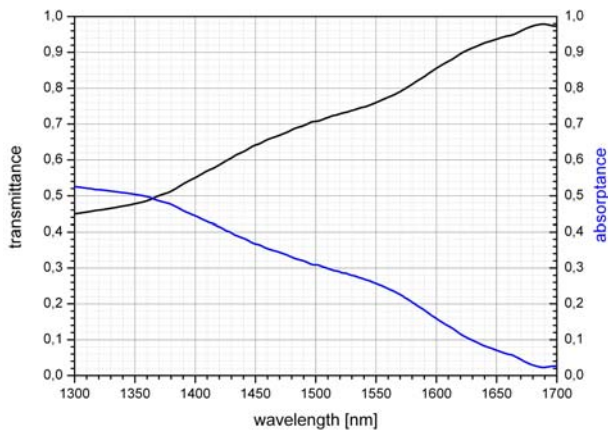
**SA 1020-40-X**



**SA 1064-40-X**



**SA 1550-25-X**



**SA 2000-1-X**

