

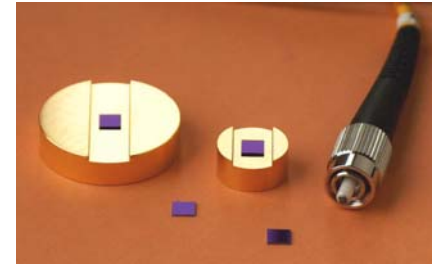
# SAM™ – saturable absorber mirror product overview

- for passive mode-locking of solid state, fiber or microchip lasers

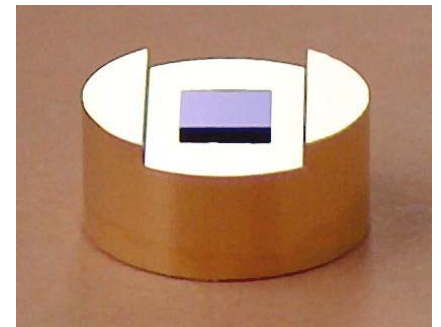


*New: SAMs for 2000nm and 2400nm!*

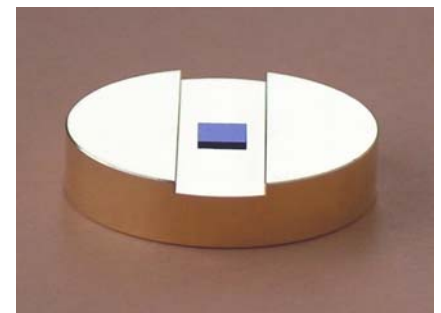
<b>SAM 800</b>	laser wavelength high reflection band (R>99%) saturable absorption relaxation time	$\lambda = 800 \text{ nm}$ $\lambda = 710 - 860 \text{ nm}$ $A_0 = 3 - 6 \%$ $\tau = 500 \text{ fs}$
<b>SAM 940</b>	laser wavelength high reflection band (R>99%) saturable absorption relaxation time	$\lambda = 940 \text{ nm}$ $\lambda = 910 - 990 \text{ nm}$ $A_0 = 4 - 30 \%$ $\tau = 1 \text{ ps}$
<b>SAM 980</b>	laser wavelength high reflection band (R>99%) saturable absorption relaxation time	$\lambda = 980 \text{ nm}$ $\lambda = 940 - 1000 \text{ nm}$ $A_0 = 2 - 50 \%$ $\tau = 500 \text{ fs}$
<b>SAM 1040</b>	laser wavelength high reflection band (R>99%) saturable absorption relaxation time	$\lambda = 1040 \text{ nm}$ $\lambda = 980 .. 1060 \text{ nm}$ $A_0 = 0.7 - 66 \%$ $\tau = 500 \text{ fs} - 12 \text{ ps}$
<b>SAM 1064</b>	laser wavelength high reflection band (R>99%) saturable absorption relaxation time	$\lambda = 1064 \text{ nm}$ $\lambda = 1030 .. 1100 \text{ nm}$ $A_0 = 0.7 - 70 \%$ $\tau = 500 \text{ fs} - 124 \text{ ps}$
<b>SAM 1100</b>	laser wavelength high reflection band (R>99%) saturable absorption relaxation time	$\lambda = 1100 \text{ nm}$ $\lambda = 1030 .. 1160 \text{ nm}$ $A_0 = 50 - 90 \%$ $\tau = 500 \text{ fs}$
<b>SAM 1150</b>	laser wavelength high reflection band (R>99%) saturable absorption relaxation time	$\lambda = 1150 \text{ nm}$ $\lambda = 1110 .. 1200 \text{ nm}$ $A_0 = 3 - 6 \%$ $\tau = 500 \text{ fs}$



mounting types



12.7 mm  $\varnothing$  - (1/2"  $\varnothing$ ) - Cu-Mount

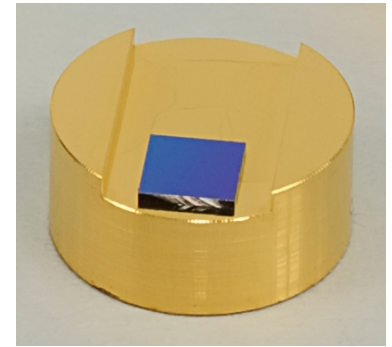


25.4 mm  $\varnothing$  - (1"  $\varnothing$ ) - Cu-Mount

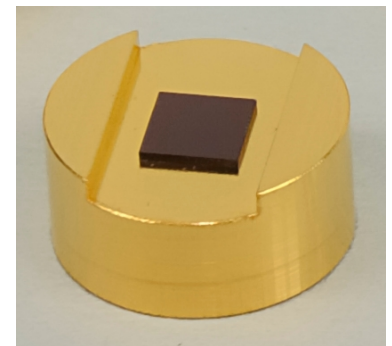


fiber coupled SAM

<b>SAM 1300</b>	laser wavelength high reflection band (R>99%) saturable absorption relaxation time	$\lambda = 1300 \text{ nm}$ $\lambda = 1220 \dots 1320 \text{ nm}$ $A_0 = 4 - 12 \%$ $\tau = 1 \text{ ps}$
<b>SAM 1340</b>	laser wavelength high reflection band (R>99%) saturable absorption relaxation time	$\lambda = 1340 \text{ nm}$ $\lambda = 1310 \dots 1370 \text{ nm}$ $A_0 = 1 - 15 \%$ $\tau = 1 \text{ ps}$
<b>SAM 1420</b>	laser wavelength high reflection band (R>99%) saturable absorption relaxation time	$\lambda = 1420 \text{ nm}$ $\lambda = 1360 \dots 1460 \text{ nm}$ $A_0 = 1 - 4 \%$ $\tau = 10 \text{ ps}$
<b>SAM 1510</b>	laser wavelength high reflection band (R>99%) saturable absorption relaxation time	$\lambda = 1510 \text{ nm}$ $\lambda = 1470 \dots 1570 \text{ nm}$ $A_0 = 6 - 11 \%$ $\tau = 10 \text{ ps}$
<b>SAM 1550</b>	laser wavelength high reflection band (R>99%) saturable absorption relaxation time	$\lambda = 1550 \text{ nm}$ $\lambda = 1500 \dots 1600 \text{ nm}$ $A_0 = 1 - 55 \%$ $\tau = 2 - 12 \text{ ps}$
<b>SAM 2000</b>	laser wavelength high reflection band (R>99%) saturable absorption relaxation time	$\lambda = 2000 \text{ nm}$ $\lambda = 1900 \dots 2050 \text{ nm}$ $A_0 = 2 - 8 \%$ $\tau = 500 \text{ fs}$
<b>SAM 2400</b>	laser wavelength high reflection band (R>99%) saturable absorption relaxation time	$\lambda = 2400 \text{ nm}$ $\lambda = 2350 \dots 2600 \text{ nm}$ $A_0 = 1 \%$ $\tau = 500 \text{ fs}$



edge mounting



center mounting



watercooled 25.0 mm  $\varnothing$  Cu-mount

- Chip area: 1 mm x 1 mm, 1.3 mm x 1.3 mm, 4 mm x 4 mm, 8 mm x 8 mm (other dimensions on request)
- Chip thickness: 450  $\mu\text{m}$  (other on request)
- Mounting:
- unmounted
  - glued or soldered on:
    - 12.7 mm  $\varnothing$  (1/2"  $\varnothing$ ) Cu-mount
    - 25.0 mm  $\varnothing$  Cu-mount
    - 25.4 mm  $\varnothing$  (1"  $\varnothing$ ) Cu-mount
  - soldered on a watercooled 25.0 mm  $\varnothing$  Cu-mount
  - thin film soldered on watercooled Cu-mount
  - fiber coupled (SMF, PM)
  - mounting on custom mounts on request