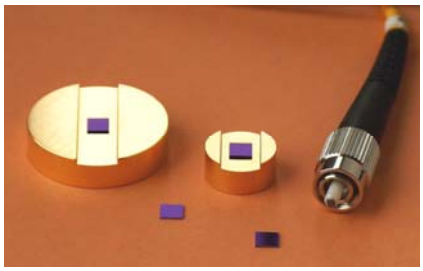
SAM™ – Saturable Absorber Mirror
Product Overview

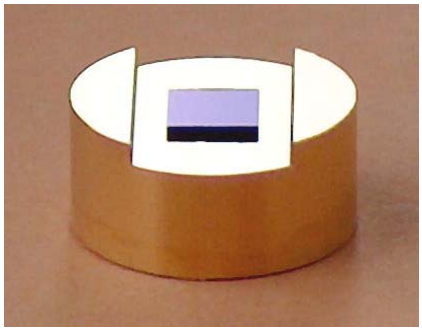
BATOP GmbH
Wildenbruchstrasse 15
07745 Jena
Germany

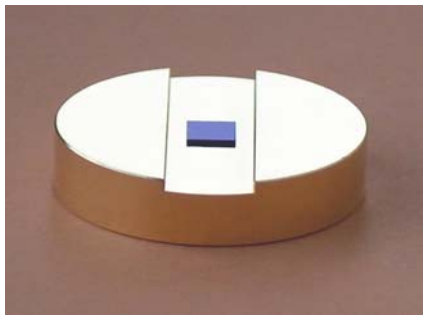
Phone: +49 3641 634009 - 0
Fax: +49 3641 634009 - 20
URL: http://www.batop.de
e-mail: info@batop.de

Application: - Passive mode-locking
- Q-switching

SAM 800	Laser wavelength	λ = 780 - 830 nm
	Saturable absorption	A_0 = 5 - 10 %
	Relaxation time	τ = 1 ps
SAM 940	Laser wavelength	λ = 910 - 990 nm
	Saturable absorption	A_0 = 4 - 30 %
	Relaxation time	τ = 1 ps
SAM 980	Laser wavelength	λ = 940 – 1000 nm
	Saturable absorption	A_0 = 2 - 70 %
	Relaxation time	τ = 500 fs
SAM 1040	Laser wavelength	λ = 1020 .. 1050 nm
	Saturable absorption	A_0 = 0.7 - 64 %
	Relaxation time	τ = 500 fs - 10 ps
SAM 1064	Laser wavelength	λ = 1050 .. 1100 nm
	Saturable absorption	A_0 = 0.7 - 70 %
	Relaxation time	τ = 500 fs - 124 ps
SAM 1100	Laser wavelength	λ = 1070 .. 1120 nm
	Saturable absorption	A_0 = 30 - 90 %
	Relaxation time	τ = 500 fs
SAM 1150	Laser wavelength	λ = 1100 .. 1200 nm
	Saturable absorption	A_0 = 3 - 32 %
	Relaxation time	τ = 500 fs / 1ps
SAM 1300	Laser wavelength	λ = 1230 .. 1330 nm
	Saturable absorption	A_0 = 4 - 10 %
	Relaxation time	τ = 10 ps
SAM 1340	Laser wavelength	λ = 1310 .. 1370 nm
	Saturable absorption	A_0 = 1 - 15 %
	Relaxation time	τ = 1 ps
SAM 1420	Laser wavelength	λ = 1360 .. 1460 nm
	Saturable absorption	A_0 = 1 - 4 %
	Relaxation time	τ = 10 ps

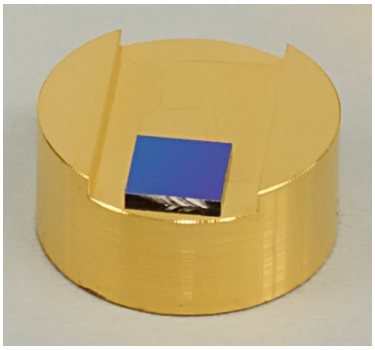

Mounting Options


12.7 mm ∅ - (1/2" ∅) - Cu-Mount

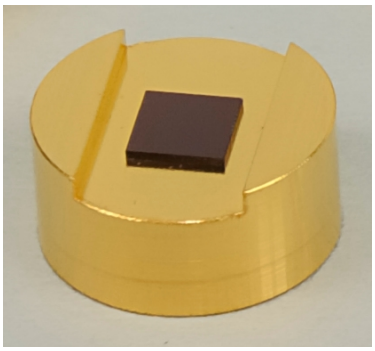

25.4 mm ∅ - (1" ∅) - Cu-Mount


Fiber coupled SAM

SAM 1510	Laser wavelength	λ = 1470 .. 1570 nm
	Saturable absorption	A_0 = 6 - 23 %
	Relaxation time	τ = 10 ps
SAM 1550	Laser wavelength	λ = 1500 .. 1600 nm
	Saturable absorption	A_0 = 2 - 55 %
	Relaxation time	τ = 2 - 12 ps
SAM 2000	Laser wavelength	λ = 1900 .. 2050 nm
	Saturable absorption	A_0 = 2 - 54 %
	Relaxation time	τ = 10 ps
SAM 2400	Laser wavelength	λ = 2300 .. 2600 nm
	Saturable absorption	A_0 = 1 % / 1.5 %
	Relaxation time	τ = 10 ps
SAM 3000	Laser wavelength	λ = 2500 .. 3200 nm
	Saturable absorption	A_0 = 9 - 33 %
	Relaxation time	τ = 10ps



Edge mounting



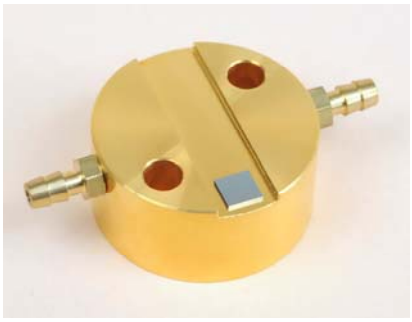
Center mounting

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 µm (other on request)

Mounting:

- Unmounted
- Glued or soldered on:
  - 12.7 mm ∅ (1/2" ∅) Cu-mount
  - 25.0 mm ∅ Cu-mount
  - 25.4 mm ∅ (1" ∅) Cu-mount
- Soldered on a water-cooled 25.0 mm ∅ Cu-mount
- Thin film soldered on a water-cooled Cu-mount
- Fiber coupled (SMF, PM fiber)
- Mounting on custom mounts on request



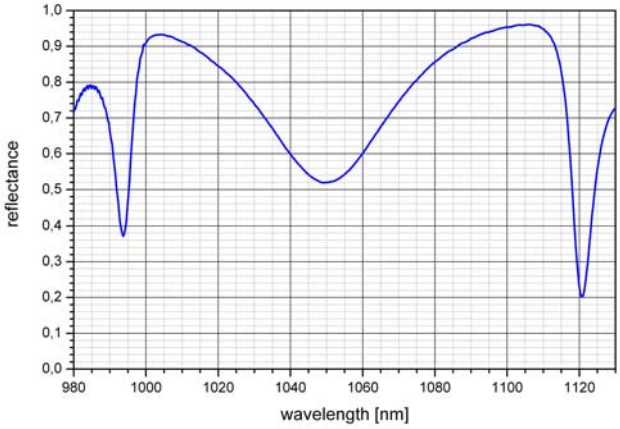
Water-cooled 25.0 mm ∅ Cu-mount

Batch of 4 chips, 1.3 mm x 1.3 mm

Other wavelengths and parameters on request.

Spectral reflection:

SAM-1064-38-7ps-x



SAM-2000-43-10ps-x