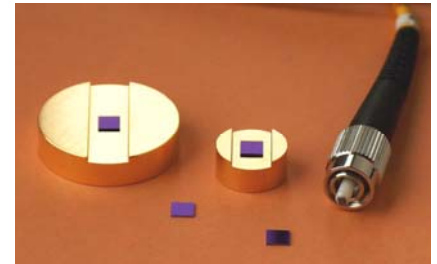


SAMTM – Saturable Absorber Mirror

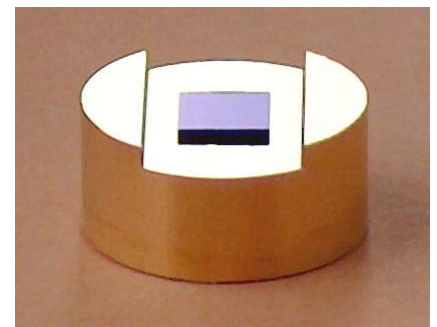
Product Overview

Application: - Passive mode-locking
- Q-switching

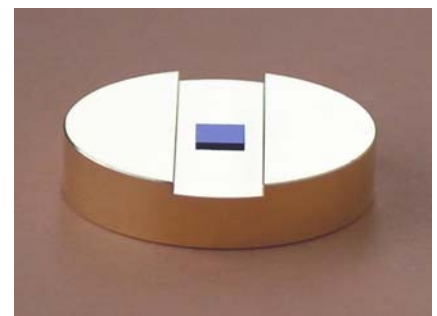
SAM 800	Laser wavelength Saturable absorption Relaxation time	$\lambda = 780 - 830 \text{ nm}$ $A_0 = 5 - 10 \%$ $\tau = 1 \text{ ps}$
SAM 940	Laser wavelength Saturable absorption Relaxation time	$\lambda = 910 - 990 \text{ nm}$ $A_0 = 4 - 30 \%$ $\tau = 1 \text{ ps}$
SAM 980	Laser wavelength Saturable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



Mounting Options



12.7 mm Ø - (1/2" Ø) - Cu-Mount

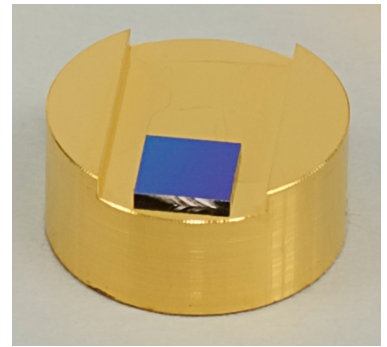


25.4 mm Ø - (1" Ø) - Cu-Mount

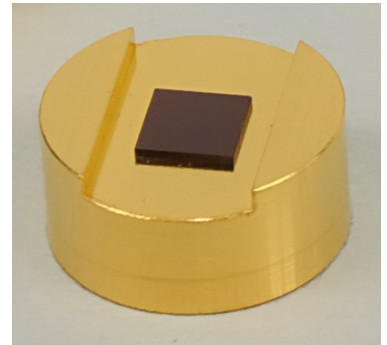


Fiber coupled SAM

SAM 1510	Laser wavelength Saturable absorption Relaxation time	$\lambda = 1470 \dots 1570 \text{ nm}$ $A_0 = 6 - 23 \%$ $\tau = 10 \text{ ps}$
SAM 1550	Laser wavelength Saturable absorption Relaxation time	$\lambda = 1500 \dots 1600 \text{ nm}$ $A_0 = 2 - 55 \%$ $\tau = 2 - 12 \text{ ps}$
SAM 2000	Laser wavelength Saturable absorption Relaxation time	$\lambda = 1900 \dots 2050 \text{ nm}$ $A_0 = 2 - 54 \%$ $\tau = 10 \text{ ps}$
SAM 2400	Laser wavelength Saturable absorption Relaxation time	$\lambda = 2300 \dots 2600 \text{ nm}$ $A_0 = 1 \%$ / 1.5% $\tau = 10 \text{ ps}$
SAM 3000	Laser wavelength Saturable absorption Relaxation time	$\lambda = 2500 \dots 3200 \text{ nm}$ $A_0 = 9 - 33 \%$ $\tau = 10 \text{ ps}$



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 $\varnothing$ (1/2" $\varnothing$) Cu-mount
 - 25.0 mm $\varnothing$ Cu-mount
 - 25.4 mm $\varnothing$ (1" $\varnothing$) Cu-mount
 - Soldered on a water-cooled 25.0 mm $\varnothing$ 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 $\varnothing$ Cu-mount

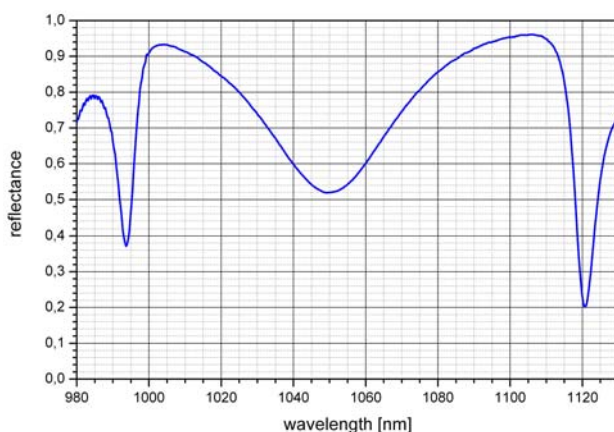


Batch of 4 chips, 1.3 mm x 1.3 mm

Other wavelengths and parameters on request.

Spectral reflection:

SAM-1064-38-7ps-x



SAM-2000-43-10ps-x

