

## SAM™ data sheet SAM-810-5-1ps-x, $\lambda = 810 \text{ nm}$

Laser wavelength	$\lambda = 810 \text{ nm}$
High reflection band (R > 90%)	$\lambda = 785 \dots 830 \text{ nm}$
Absorbance	$A_0 = 5 \%$
Modulation depth	$\Delta R = 3 \%$
Non-saturable loss	$A_{ns} = 2 \%$
Saturation fluence	$\Phi_{sat} = 110 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 1 \text{ ps}$
Damage threshold	$\Phi_{sat} = 2 \text{ mJ}/\text{cm}^2$
Chip area	4mm x 4mm; other dimensions on request
Chip thickness	450 $\mu\text{m}$
Protection	the SAM is protected with a dielectric front layer

Mounting option **x** denotes the type of mounting as follows:

<b>x</b> = 0	unmounted
<b>x</b> = 12.7 g	glued on a gold plated Cu-cylinder with 12.7 mm $\varnothing$
<b>x</b> = 25.4 g	glued on a gold plated Cu-cylinder with 25.4 mm $\varnothing$
<b>x</b> = 12.7 s	soldered on a gold plated Cu-cylinder with 12.7 mm $\varnothing$
<b>x</b> = 25.4 s	soldered on a gold plated Cu-cylinder with 25.4 mm $\varnothing$
<b>x</b> = 25.0 w	soldered on a water cooled Cu-cylinder with 25.0 mm $\varnothing$
<b>x</b> = FC	mounted on a 1 m monomode fiber cable with FC connector

### Low intensity spectral reflectance

