

## SAM™ Data Sheet SAM-1040-40-9ps-x, $\lambda = 1040$ nm

Laser wavelength	$\lambda = 1040$ nm
High reflection band ( $R > 58\%$ )	$\lambda = 990 \dots 1100$ nm
Absorptance	$A_0 = 40 \%$
Modulation depth	$\Delta R = 25 \%$
Non-saturable loss	$A_{ns} = 15 \%$
Saturation fluence	$\Phi_{sat} = 90 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 9$ ps
Damage threshold	$\Phi = 1 \text{ mJ}/\text{cm}^2$
Chip area	4mm x 4mm; other dimensions on request
Chip thickness	450 $\mu\text{m}$ ; optional: 150 $\mu\text{m}$ on request
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> = FC	mounted on a 1 m monomode fiber cable with FC connector

### Low intensity spectral reflectance

