

## SAM™ Data Sheet SAM-1040-43-1ps-x, $\lambda = 1040$ nm

Laser wavelength	$\lambda = 1040$ nm
High reflection band (R > 40%)	$\lambda = 990.. 1080$ nm
Absorbance	$A_0 = 43$ %
Modulation depth	$\Delta R = 25$ %
Non-saturable loss	$A_{ns} = 18$ %
Saturation fluence	$\Phi_{sat} = 70$ $\mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 1$ ps
Damage threshold	$\Phi = 1.5$ $\text{mJ}/\text{cm}^2$
Chip area	4 mm x 4 mm; 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 copper heat sink with 12.7 mm $\varnothing$
<b>x</b> = 25.4 g	glued on a copper heat sink with 25.4 mm $\varnothing$
<b>x</b> = 12.7 s	soldered on a copper heat sink with 12.7 mm $\varnothing$
<b>x</b> = 25.4 s	soldered on a copper heat sink with 25.4 mm $\varnothing$
<b>x</b> = 25.0 w	soldered on a water cooled copper heat sink with 25.0 mm $\varnothing$
<b>x</b> = FC	mounted on a 1 m single mode fiber with FC connector

### Low intensity spectral reflectance and dispersion

