

SAM™ data sheet SAM-1040-30-x-500fs, $\lambda = 1040 \text{ nm}$

Laser wavelength	$\lambda = 1040 \text{ nm}$
High reflection band (R > 70%)	$\lambda = 1020 \dots 1100 \text{ nm}$
Absorbance	$A_0 = 30 \%$
Modulation depth	$\Delta R = 20 \%$
Non-saturable loss	$A_{ns} = 10 \%$
Saturation fluence	$\Phi_{sat} = 120 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 500 \text{ fs}$
Damage threshold	$300 \text{ MW}/\text{cm}^2$
Chip area	4mm x 4mm; other dimensions on request
Chip thickness	400 μm
Protection	the SAM is protected with a dielectric front layer

Mounting of SAM-1040-30-x-500fs denotes the type of mounting as follows:

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

Low intensity spectral reflectance

