

SAM™ data sheet SAM-1040-0.7-x-1ps, $\lambda = 1040 \text{ nm}$

Laser wavelength	$\lambda = 1040 \text{ nm}$
High reflection band (R > 99%)	$\lambda = 990 \dots 1050 \text{ nm}$
Absorbance	$A_0 = 0.7 \%$
Modulation depth	$\Delta R = 0.4 \%$
Non-saturable loss	$A_{ns} = 0.3 \%$
Saturation fluence	$\Phi_{sat} = 90 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 1 \text{ ps}$
Damage threshold	$1 \text{ GW}/\text{cm}^2$
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-1040-0.7-x-1ps 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 = 25.4 w	soldered on a water cooled Cu-cylinder with 25.4 mm \varnothing
x = FC	mounted on a 1 m monomode fiber cable with FC connector

Low intensity spectral reflectance



