

SAM™ Data Sheet SAM-1040-10-1ps-x, λ = 1040 nm

Laser wavelength	$\lambda = 1040 \text{ nm}$
High reflection band (R > 88%)	λ = 1010 1100 nm
Absorbance	$A_0 = 10 \%$
Modulation depth	$\Delta R = 6 \%$
Non-saturable loss	$A_{ns} = 4 \%$
Saturation fluence	$\Phi_{sat} = 35 \ \mu J/cm^2$
Relaxation time constant	τ ~ 1 ps
Damage threshold	$\Phi = 3 \text{ mJ/cm}^2$
Chip area	4 mm x 4 mm; other dimensions on request
Chip thickness	450 μm; optional: 150 μm on request
Protection	the SAM is protected with a dielectric front layer
Mounting option x denotes the type of mounting as follows:	
$\mathbf{x} = 0$	unmounted
x = 12.7 g	glued on a copper heat sink with 12.7 mm $arnothing$
x = 25.4 g	glued on a copper heat sink with 25.4 mm $arnothing$
x = 12.7 s	soldered on a copper heat sink with 12.7 mm $arnothing$
x = 25.4 s	soldered on a copper heat sink with 25.4 mm \varnothing

x = 25.0 w	soldered on a water cooled copper heat sink with 25.0 mm \varnothing
x = FC	mounted on a 1 m single mode fiber with FC connector

Low intensity spectral reflectance and dispersion

