

SAM™ Data Sheet SAM-1100-30-500fs-x, $\lambda = 1100 \text{ nm}$

Laser wavelength	$\lambda = 1100 \text{ nm}$
High reflection band (R > 50%)	$\lambda = 1070 \dots 1145 \text{ nm}$
Absorptance	$A_0 = 30 \%$
Modulation depth	$\Delta R = 20 \%$
Non-saturable loss	$A_{ns} = 10 \%$
Saturation fluence	$\Phi_{sat} = 110 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 500 \text{ fs}$
Absorber layer	multiple quantum well
Damage threshold	$600 \text{ MW}/\text{cm}^2$
Chip area	4mm x 4mm; 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:

x = 0	unmounted
x = 12.7 g	glued on a copper heat sink with 12.7 mm \varnothing
x = 25.4 g	glued on a copper heat sink with 25.4 mm \varnothing
x = 12.7 s	soldered on a copper heat sink with 12.7 mm \varnothing
x = 25.4 s	soldered on a copper heat sink with 25.4 mm \varnothing
x = 25.0 w	soldered water cooled copper heat sink with 25.0 mm \varnothing
x = FC/PC	mounted on a 1 m monomode fiber cable with FC/PC connector

Low intensity spectral reflectance

