

**SAM™ Data Sheet SAM-1100-90-500fs-x,  $\lambda = 1100 \text{ nm}$**

Laser wavelength	$\lambda = 1100 \text{ nm}$
High reflection band	$\lambda = 1040 \dots 1150 \text{ nm}$
Absorptance	$A_0 = 90 \%$
Modulation depth	$\Delta R = 50 \%$
Non-saturable loss	$A_{ns} = 40 \%$
Saturation fluence	$\Phi_{sat} = 40 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 500 \text{ fs}$
Damage threshold	$\Phi = 400 \mu\text{J}/\text{cm}^2$
Chip area	4.0 mm x 4.0 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:

- 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**

