

**SAM™ Data Sheet SAM-1100-50-500fs-x,  $\lambda = 1100 \text{ nm}$**

Laser wavelength	$\lambda = 1100 \text{ nm}$
High reflection band	$\lambda = 1020 \text{ .. } 1120 \text{ nm}$
Absorptance	$A_0 = 50 \%$
Modulation depth	$\Delta R = 28 \%$
Non-saturable loss	$A_{ns} = 22 \%$
Saturation fluence	$\Phi_{sat} = 130 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 500 \text{ fs}$
Absorber layer	multiple quantum well
Damage threshold	$300 \text{ MW}/\text{cm}^2$
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**

