

### SAM™ data sheet SAM-800-32-1ps-x, $\lambda = 880 \text{ nm}$

|                          |  |
|--------------------------|--|
| Laser wavelength         | $\lambda = 800 \text{ nm}$                         |
| High reflection band     | $\lambda = 780 \text{ .. } 840 \text{ nm}$         |
| Absorbance               | $A_0 = 32 \%$                                      |
| Modulation depth         | $\Delta R = 20 \%$                                 |
| Non-saturable loss       | $A_{\text{ns}} = 12 \%$                            |
| Saturation fluence       | $\Phi_{\text{sat}} = 50 \mu\text{J}/\text{cm}^2$   |
| Relaxation time constant | $\tau \sim 1 \text{ ps}$                           |
| Damage threshold         | $\Phi = 1 \text{ mJ}/\text{cm}^2$                  |
| 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:

|                   |   |
|-------------------|---|
| <b>x</b> = 0      | unmounted   |
| <b>x</b> = 12.7 g | glued on a gold plated Cu-cylinder with 12.7 mm $\varnothing$     |
| <b>x</b> = 25.4 g | glued on a gold plated Cu-cylinder with 25.4 mm $\varnothing$     |
| <b>x</b> = 12.7 s | soldered on a gold plated Cu-cylinder with 12.7 mm $\varnothing$  |
| <b>x</b> = 25.4 s | soldered on a gold plated Cu-cylinder with 25.4 mm $\varnothing$  |
| <b>x</b> = 25.0 w | soldered on a water cooled Cu-cylinder with 25.0 mm $\varnothing$ |
| <b>x</b> = FC     | mounted on a 1 m monomode fiber cable with FC connector           |

#### Low intensity spectral reflectance

