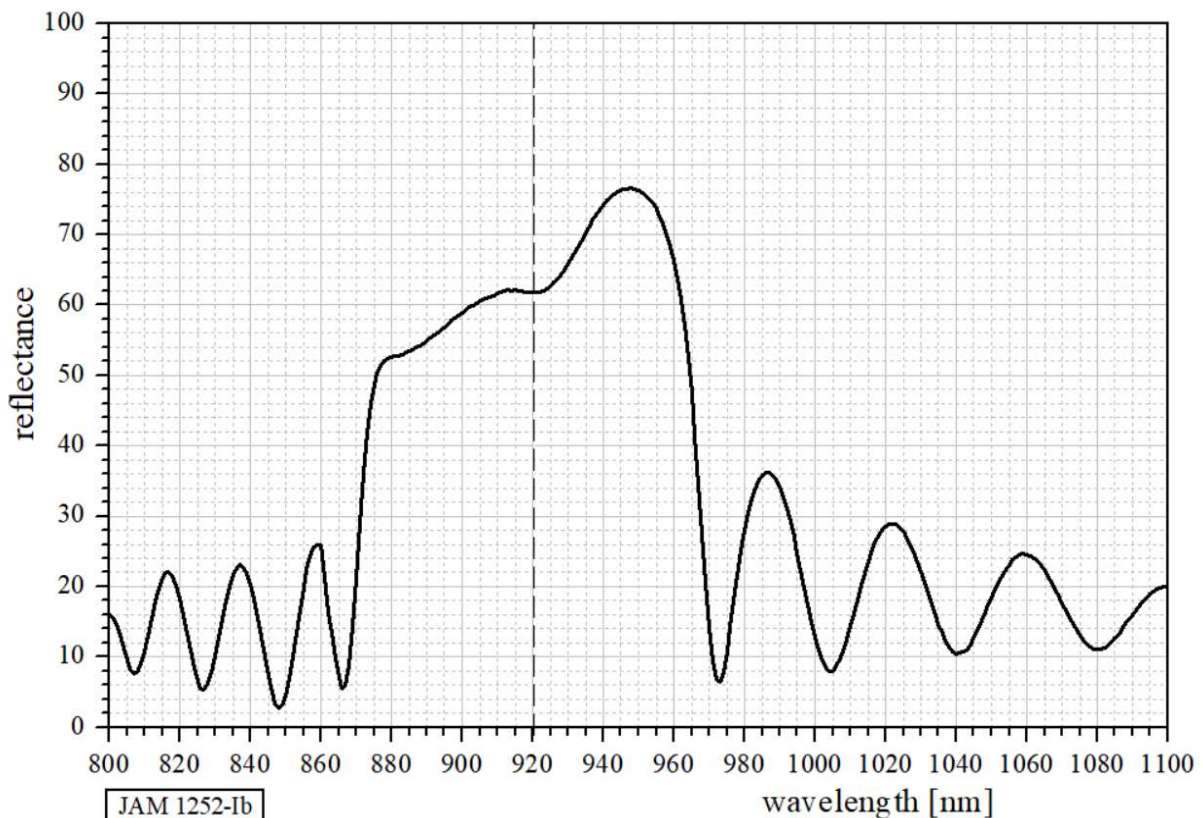
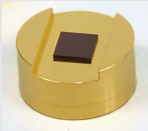
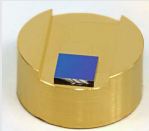


**SAM™ Data Sheet SAM-920-45-0.5ps-30-x,  $\lambda = 920$  nm**

|                                  | Minimum  | Typical Value                 | Maximum                      |
|----------------------------------|--|-------------------------------|------------------------------|
| Operational wavelength $\lambda$ |  | 920 nm                        |                              |
| High reflection band             | 890 nm   | –                             | 950 nm                       |
| Absorbance A                     | 36 %   | 45 %                          | 54 %                         |
| Modulation depth $\Delta R$      | 15 %   | 22 %                          | -                            |
| Non-saturable loss $A_{ns}$      | -  | 23 %                          | 30 %                         |
| Saturation fluence $\Phi_{sat}$  | 15 $\mu\text{J}/\text{cm}^2$                   | 30 $\mu\text{J}/\text{cm}^2$  | 50 $\mu\text{J}/\text{cm}^2$ |
| Relaxation time constant $\tau$  | 0.3 ps   | 0.5 ps                        | 0.8 ps                       |
| Damage threshold $\Phi$          |  | 800 $\mu\text{J}/\text{cm}^2$ |                              |
| Absorber Peak Temperature        |  |                               | 150°C <sup>1</sup>           |
| Chip thickness                   | 425 $\mu\text{m}$                              | 450 $\mu\text{m}$             | 475 $\mu\text{m}$            |
| Protection                       | SAM is protected with a dielectric front layer |                               |                              |

<sup>1</sup> Please make sure that this temperature is not exceeded in pulsed operation shortly after the optical pulse.

**Low intensity spectral reflectance**


| Mounting Options<br>SAM-920-45-0.5ps-30-x  | Description  |
|--|--|
| x = 4.0-0  | Single chip, unmounted, chip size 4.0mm x 4.0mm  |
| x = 1.0b-0   | Batch of 4 unmounted chips, chip size 1.0mm x 1.0mm  |
| x = 1.3b-0   | Batch of 4 unmounted chips, chip size 1.3mm x 1.3mm  |
|  |  |
| x = 4.0-12.7g-c / 4.0-12.7g-e  | chip size 4.0mm x 4.0mm, glued on a gold plated Cu-cylinder with 12.7 mm Ø   |
| x = 4.0-25.0g-c / 4.0-25.0g-e  | chip size 4.0mm x 4.0mm, glued on a gold plated Cu-cylinder with 25.0 mm Ø   |
| x = 4.0-25.4g-c / 4.0-25.4g-e  | chip size 4.0mm x 4.0mm, glued on a gold plated Cu-cylinder with 25.4 mm Ø   |
| x = 4.0-12.7s-c / 4.0-12.7s-e  | chip size 4.0mm x 4.0mm, soldered on a gold plated Cu-cylinder with 12.7 mm Ø  |
| x = 4.0-25.0s-c / 4.0-25.0s-e  | chip size 4.0mm x 4.0mm, soldered on a gold plated Cu-cylinder with 25.0 mm Ø  |
| x = 4.0-25.4s-c / 4.0-25.4s-e  | chip size 4.0mm x 4.0mm, soldered on a gold plated Cu-cylinder with 25.4 mm Ø  |
| x = 4.0-25.0w-c / 4.0-25.0w-e  | chip size 4.0mm x 4.0mm, soldered on a water cooled copper heat sink with 25.0 mm diameter   |
| x = 4.0-25.4h-c / 4.0-25.4h-e  | chip size 4.0mm x 4.0mm, thin film soldered on a water cooled copper heat sink with 25.0 mm diameter for high power application  |
| -c Center mounting  | -e Edge mounting    |
| x = FC/PC / FC/APC   | mounted on a 1 m monomode fiber cable with FC/PC / FC/APC connector<br><br>available fiber types:<br><br>780-HP, HI 980, PM780-HP, Fujikura SM85-PS-U25A (polarisation maintaining (PM) fiber) |
| Other chip dimensions are also possible, please ask.   |  |