

## SAM™ Data Sheet SAM-1064-31-1ps-x, $\lambda = 1040$ nm

|                                |  |
|--------------------------------|--|
| Laser wavelength               | $\lambda = 1064$ nm                                |
| High reflection band (R > 40%) | $\lambda = 990.. 1080$ nm                          |
| Absorbance                     | $A_0 = 31$ %                                       |
| Modulation depth               | $\Delta R = 18$ %                                  |
| Non-saturable loss             | $A_{ns} = 13$ %                                    |
| Saturation fluence             | $\Phi_{sat} = 70$ $\mu\text{J}/\text{cm}^2$        |
| Relaxation time constant       | $\tau \sim 1$ ps                                   |
| Damage threshold               | $\Phi = 1.5$ $\text{mJ}/\text{cm}^2$               |
| Chip area                      | 4 mm x 4 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 copper heat sink with 12.7 mm $\varnothing$                 |
| <b>x</b> = 25.4 g | glued on a copper heat sink with 25.4 mm $\varnothing$                 |
| <b>x</b> = 12.7 s | soldered on a copper heat sink with 12.7 mm $\varnothing$              |
| <b>x</b> = 25.4 s | soldered on a copper heat sink with 25.4 mm $\varnothing$              |
| <b>x</b> = 25.0 w | soldered on a water cooled copper heat sink with 25.0 mm $\varnothing$ |
| <b>x</b> = FC     | mounted on a 1 m single mode fiber with FC connector                   |

### Low intensity spectral reflectance and dispersion

