

SAMTM Data Sheet SAM-1550-50-10ps-x, λ = 1550 nm

Laser wavelength $\lambda = 1550 \text{ nm}$

High reflection band $\lambda = 1460 ... 1600 \text{ nm}$

Absorbance $A_0 = 50 \%$ Modulation depth $\Delta R = 30 \%$ Non-saturable loss $A_{ns} = 20 \%$

Saturation fluence $\Phi_{\text{sat}} = 70 \, \mu\text{J/cm}^2$

Relaxation time constant $\tau \sim 10 \text{ ps}$

Damage threshold $\Phi = 700 \,\mu\text{J/cm}^2$

Chip area 4.0 mm x 4.0 mm; other dimensions on request

Chip thickness 450 µm

Protection the SAM is protected with a dielectric front layer

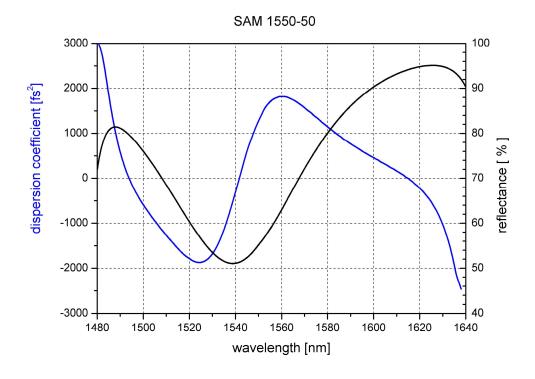
Mounting option **x** denotes the type of mounting as follows:

x = 0 unmounted x = 12.7 g glued on a gold plated Cu-cylinder with 12.7 mm Ø

 $x = 25.4 \, \mathrm{g}$ glued on a gold plated Cu-cylinder with 25.4 mm \varnothing $x = 12.7 \, \mathrm{s}$ soldered on a gold plated Cu-cylinder with 12.7 mm \varnothing $x = 25.4 \, \mathrm{s}$ soldered on a gold plated Cu-cylinder with 25.4 mm \varnothing

x = FC mounted on a 1 m monomode fiber cable with FC connector

Low intensity spectral reflectance and dispersion coefficient D₂



Group Delay Dispersion (GDD)



Dispersion coefficient $D_2(\omega) = \frac{\partial^2 \varphi}{\partial \omega^2}$

with

 $\, \varphi \,\,$ - reflected phase

$$\omega = 2\pi \frac{c}{\lambda}$$
 - angular frequency