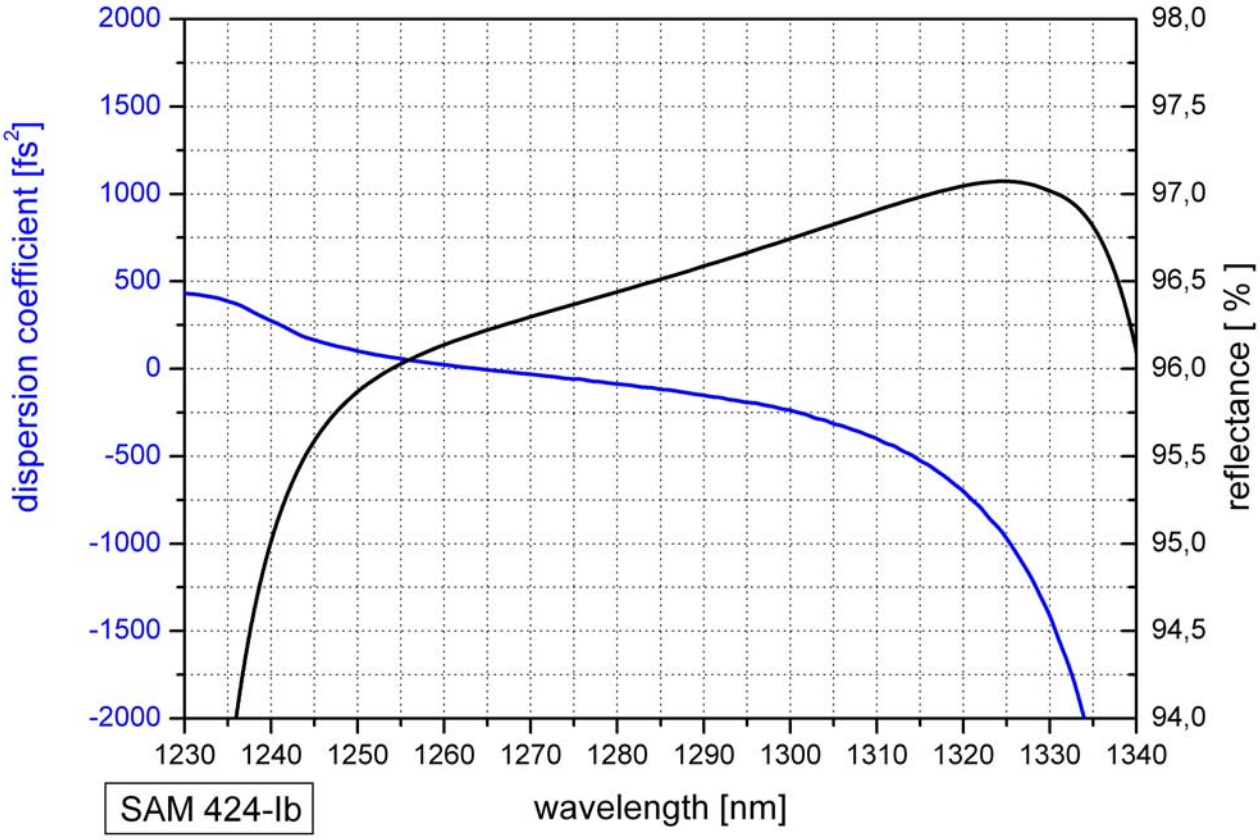
SAM™ data sheet SAM-1300-4-x, λ = 1300 nm

Laser wavelength	λ = 1300 nm
High reflection band (R > 95%)	λ = 1240 .. 1340 nm
Saturable absorptance	A_0 = 4 %
Saturation fluence	Φ_{sat} = 70 µJ/cm^2
Relaxation time constant	τ ≤ 10 ps
Modulation depth	ΔR = 2.5 %
Chip area	4mm x 4mm; other dimensions on request
Chip thickness	400 µm; optional: 150 µm on request
Protection	the SAM is protected with a dielectric front layer
Mounting of SAM-1300-4-**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 ∅
x = 25.4 g	glued on a gold plated Cu-cylinder with 25.4 mm ∅
x = 12.7 s	soldered on a gold plated Cu-cylinder with 12.7 mm ∅
x = 25.4 s	soldered on a gold plated Cu-cylinder with 25.4 mm ∅
x = 25.0 w	soldered on a water cooled Cu-cylinder with 25.0 mm ∅
x = FC	mounted on a 1 m monomode fiber cable with FC connector

Low intensity spectral reflectance and dispersion coefficient D_2



BATOP GmbH
Wildenbruchstraße 15
D-07745 Jena
Germany

Tel: +49 3641 634009 - 0
Fax: +49 3641 634009 - 20
E-mail: info@batop.de

Deutsche Bank Jena
Bank Code: 82070024
Account No: 3922655
IBAN: DE49 8207 0024 0392 2655 00

VAT Reg. No: DE 813698804
Tax Acc. No: 161/106/02514
Local Court Jena HRB 112769

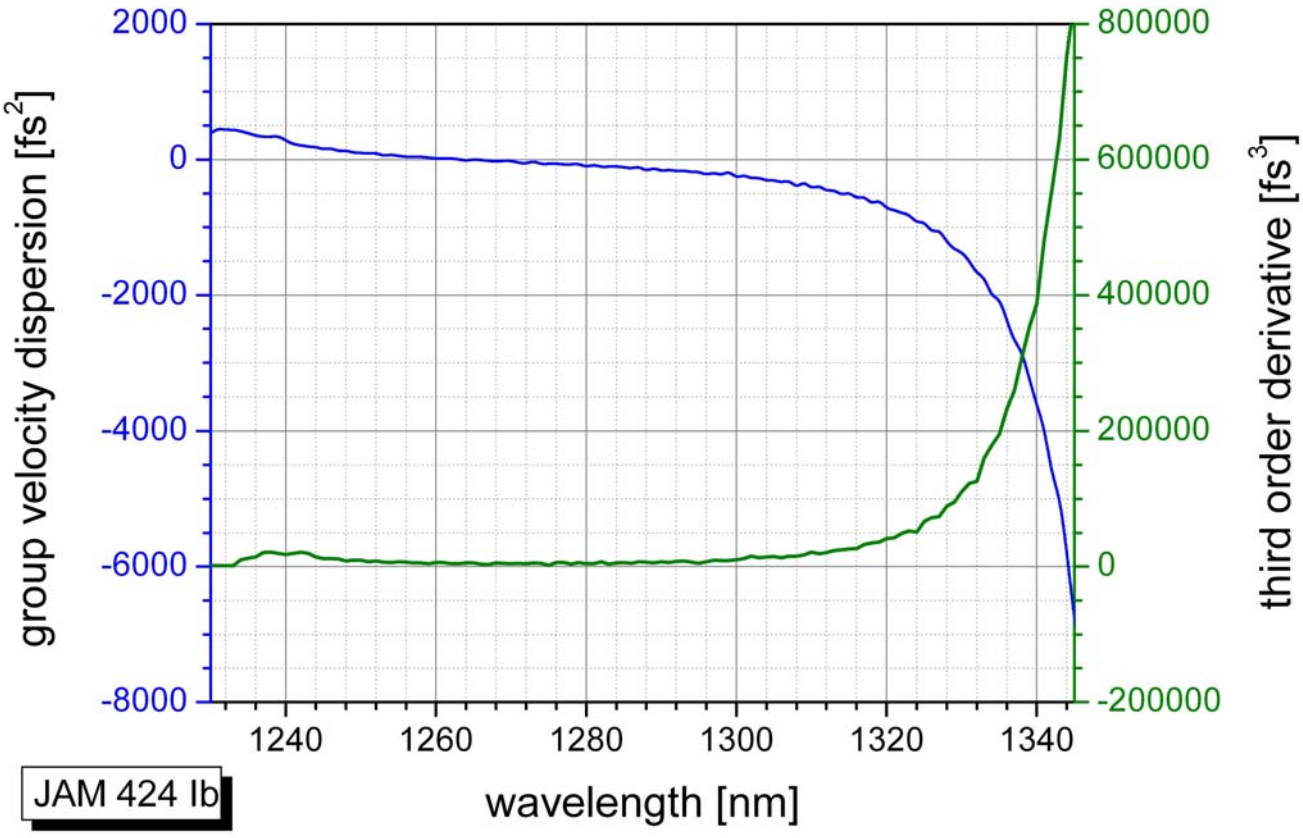
Group Delay Dispersion (GDD)

Dispersion coefficient $D_2(\omega) = \frac{\partial^2 \varphi}{\partial \omega^2}$ with φ - reflected phase

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

Third Order Dispersion (TOD)

Dispersion coefficient $D_3(\omega) = \frac{\partial^3 \varphi}{\partial \omega^3}$



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