**Data Sheet** 

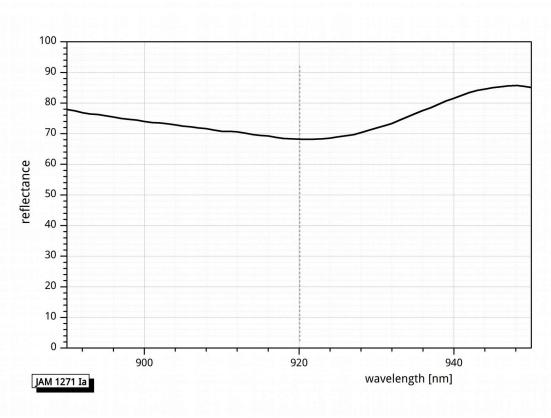


## SAM<sup>TM</sup> Data Sheet SAM-920-30-3ps-15-x, $\lambda$ = 920 nm

	Minimum	Typical Value	Maximum
Operational wavelength λ		920 nm	
High reflection band	890 nm	-	950 nm
Absorbance A	24 %	30 %	36 %
Modulation depth ∆R	15 %	20 %	-
Non-saturable loss A <sub>ns</sub>	-	10 %	15 %
Saturation fluence $\Phi_{\text{sat}}$	7 μJ/cm²	15 μJ/cm²	30 μJ/cm²
Relaxation time constant $\tau$	1.5 ps	3 ps	5 ps
Damage threshold Φ		800 μJ/cm²	
Absorber Peak Temperature			150°C <sup>1</sup>
Chip thickness	425 µm	450 μm	475 μm
Protection	SAM is protected with a dielectric front layer		

Please make sure that this temperature is not exceeded in pulsed operation shortly after the optical pulse.

## Low intensity spectral reflectance





Mounting Options			
SAM-920-45-0.5ps-30-x	Description		
<b>x</b> = 4.0-0	Single chip, unmounted, chip size 4.0mm x 4.0mm		
<b>x</b> = 1.0b-0	Batch of 4 unmounted chips, chip size 1.0mm x 1.0mm		
<b>x</b> = 1.3b-0	Batch of 4 unmounted chips, chip size 1.3mm x 1.3mm		
<b>x</b> = 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 $\varnothing$		
<b>x</b> = 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 $\varnothing$		
<b>x</b> = 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 $\varnothing$		
<b>x</b> = 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 $\varnothing$		
<b>x</b> = 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 $\varnothing$		
<b>x</b> = 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 $\varnothing$		
<b>x</b> = 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		
<b>x</b> = 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		
	available fiber types:		
	780-HP, HI 980, PM780-HP, Fujikura SM85-PS-U25A (polarisation maintaining (PM) fiber)		
Other chip dimensions are also possible, please ask.			