

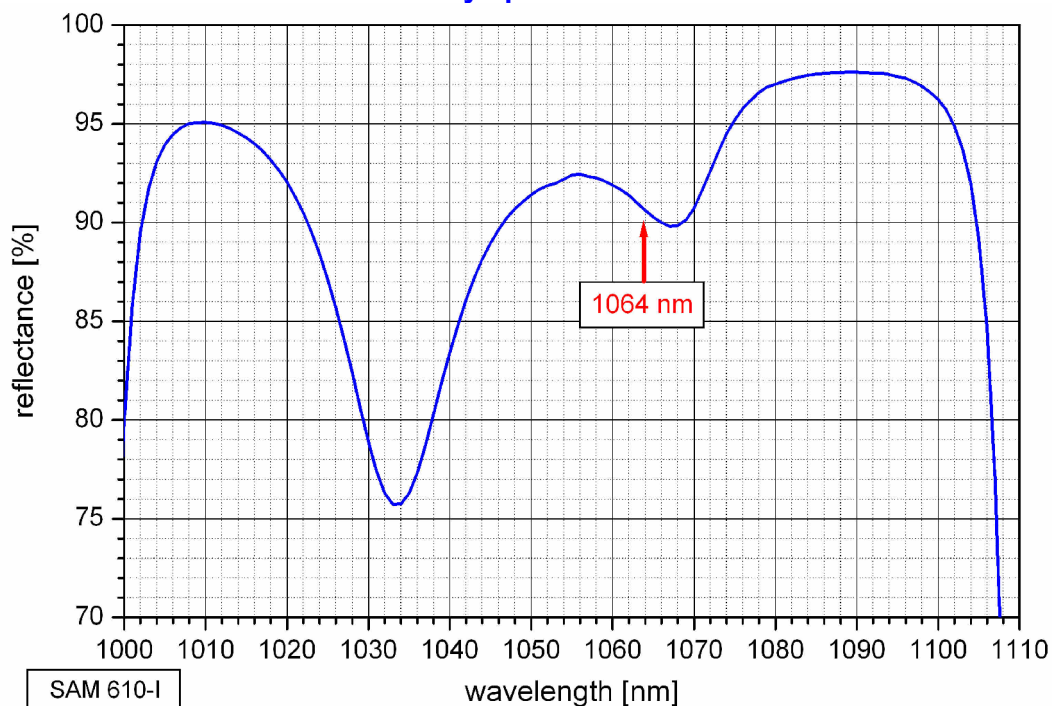
## SAM™ Data Sheet SAM-1064-10-47ps-x, $\lambda = 1064 \text{ nm}$ for microchip laser Q-switching

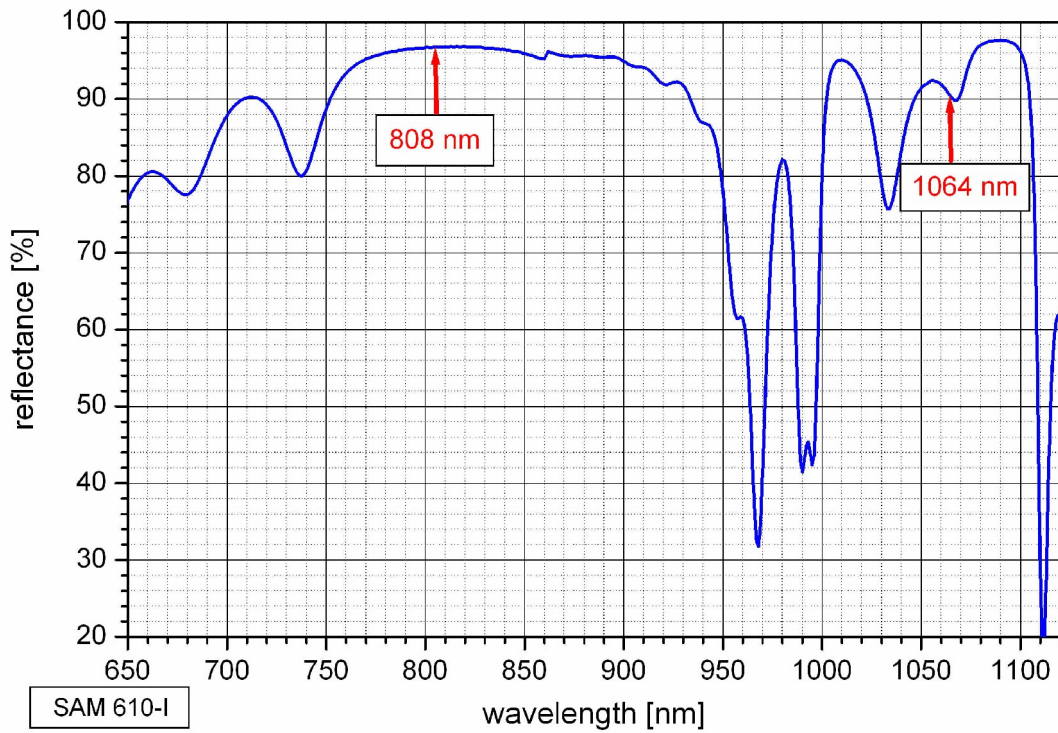
Laser wavelength	$\lambda = 1064 \text{ nm}$
High reflection band (R > 75%)	$\lambda = 1010 \dots 1100 \text{ nm}$
Reflectance at 808 nm	$R_{808} = 96 \%$
Absorbance	$A_0 = 10 \%$
Modulation depth	$\Delta R = 6 \%$
Non-saturable loss	$A_{ns} = 4 \%$
Saturation fluence	$\Phi_{sat} = 50 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 47 \text{ ps}$
Damage threshold	$500 \text{ MW}/\text{cm}^2$
Chip area	4mm x 4mm; other dimensions on request
Chip thickness	450 $\mu\text{m}$
Dielectric coating	HR @ 808 nm and AR @ 1064 nm

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

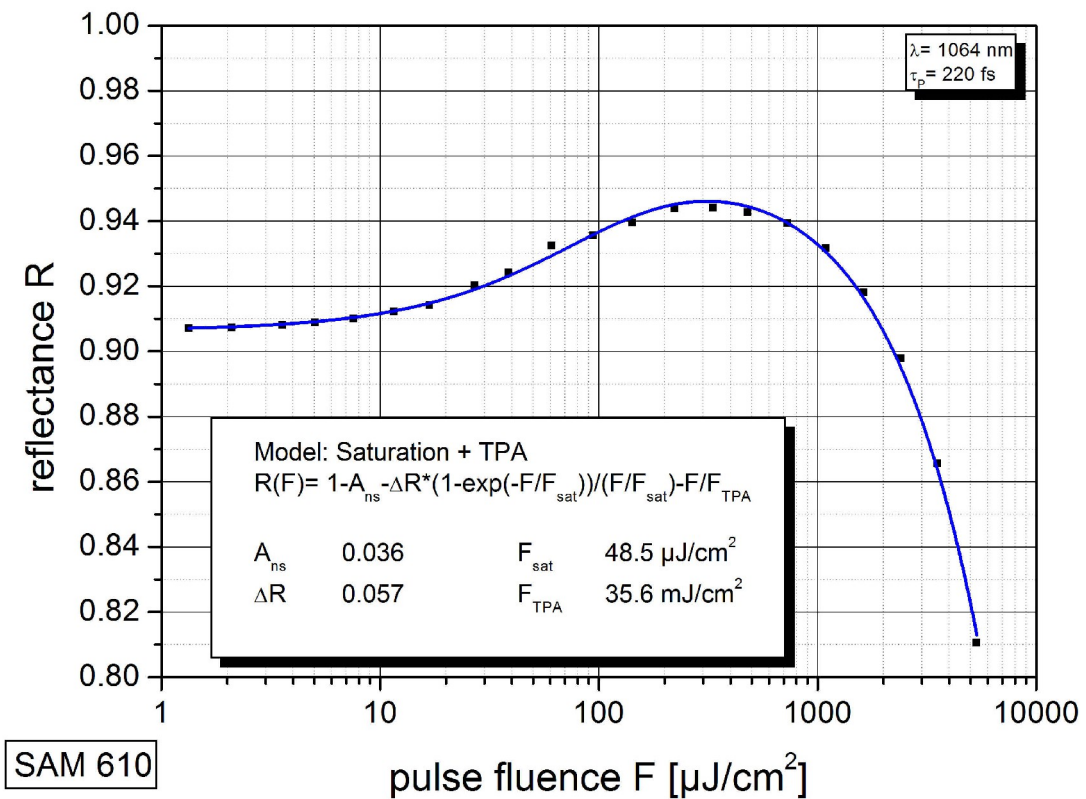
<b>x</b> = 0	unmounted
<b>x</b> = 12.7 g	glued on a copper heat sink with 12.7 mm $\varnothing$
<b>x</b> = 25.4 g	glued on a copper heat sink with 25.4 mm $\varnothing$
<b>x</b> = 12.7 s	soldered on a copper heat sink with 12.7 mm $\varnothing$
<b>x</b> = 25.4 s	soldered on a copper heat sink with 25.4 mm $\varnothing$
<b>x</b> = 25.4 w	soldered on a water cooled copper heat sink with 25.4 mm $\varnothing$
<b>x</b> = FC	mounted on a 1 m monomode fiber cable with FC connector

### Low intensity spectral reflectance





### Saturation measurement



### Pump-probe measurement

