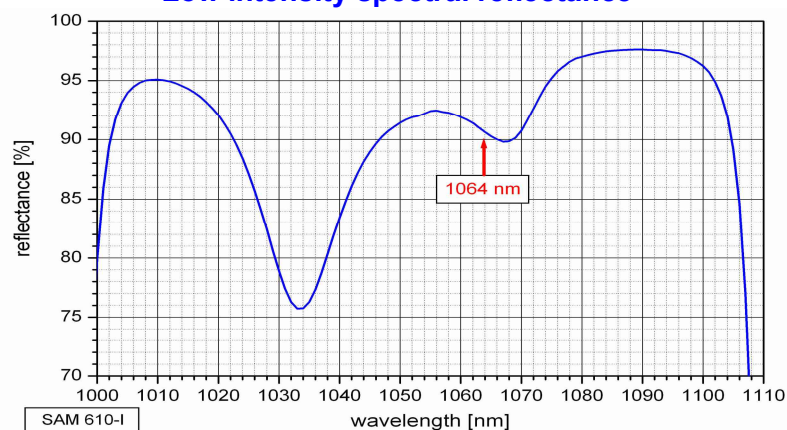
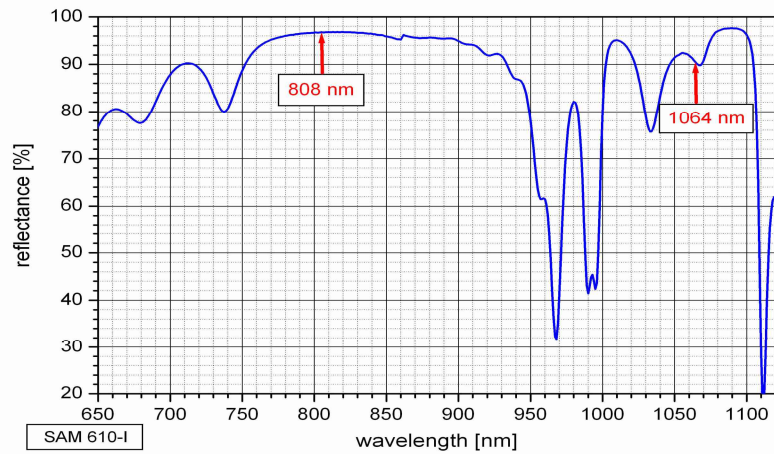


SAM™ Data Sheet SAM-1064-10-47ps-x, $\lambda = 1064 \text{ nm}$ for microchip laser Q-switching

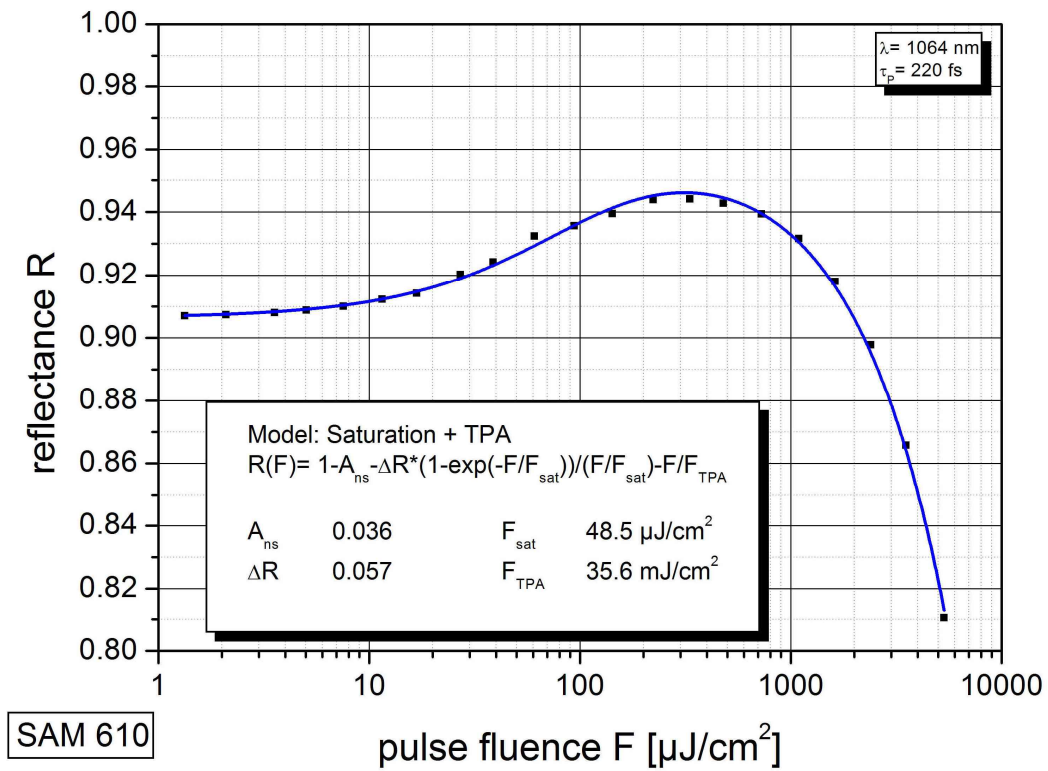
Laser wavelength	$\lambda = 1064 \text{ nm}$
High reflection band ($R > 75\%$)	$\lambda = 1010 \dots 1100 \text{ nm}$
Reflectance at 808 nm	$R_{808} = 96 \%$
Absorbance	$A_0 = 10 \%$
Modulation depth	$\Delta R = 6 \%$
Non-saturable loss	$A_{ns} = 4 \%$
Saturation fluence	$\Phi_{sat} = 50 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 47 \text{ ps}$
Damage threshold	$\Phi = 2.5 \text{ mJ}/\text{cm}^2$
Chip area	4mm x 4mm; other dimensions on request
Chip thickness	450 μm
Dielectric coating	HR @ 808 nm and AR @ 1064 nm
Mounting option x denotes the type of mounting as follows:	
x = 0	unmounted
x = 12.7 g	glued on a copper heat sink with 12.7 mm $\varnothing$
x = 25.4 g	glued on a copper heat sink with 25.4 mm $\varnothing$
x = 12.7 s	soldered on a copper heat sink with 12.7 mm $\varnothing$
x = 25.4 s	soldered on a copper heat sink with 25.4 mm $\varnothing$
x = 25.4 w	soldered on a water cooled copper heat sink with 25.4 mm $\varnothing$
x = FC	mounted on a 1 m monomode fiber cable with FC connector

Low intensity spectral reflectance





Saturation measurement



Pump-probe measurement

