

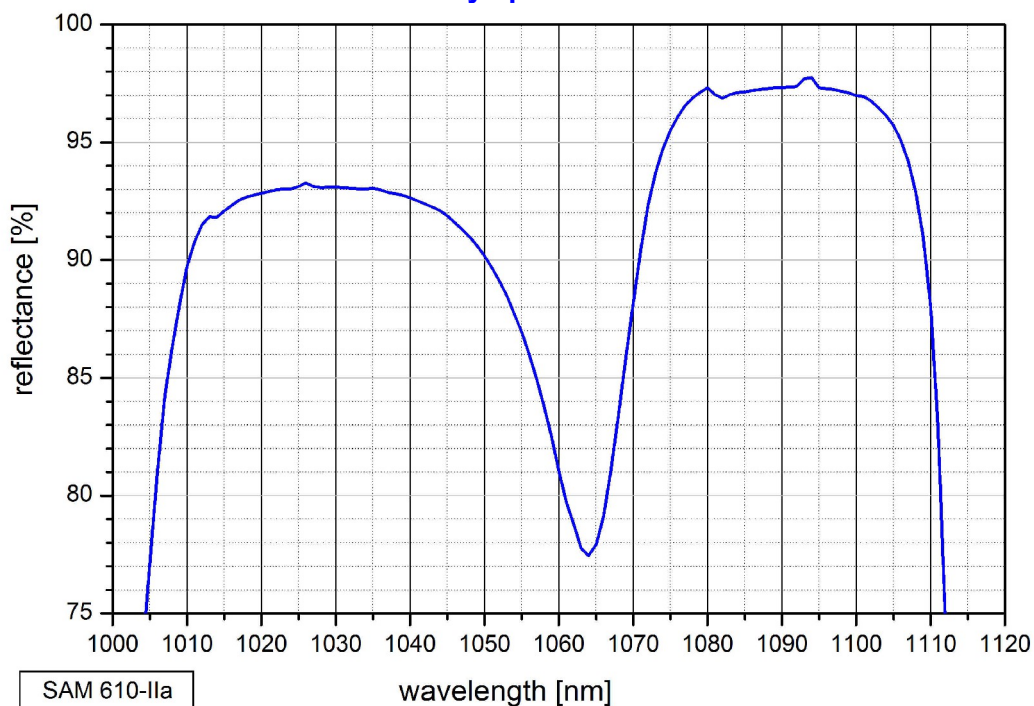
SAM™ Data Sheet SAM-1064-22-47ps-x, $\lambda = 1064 \text{ nm}$ for microchip laser Q-switching

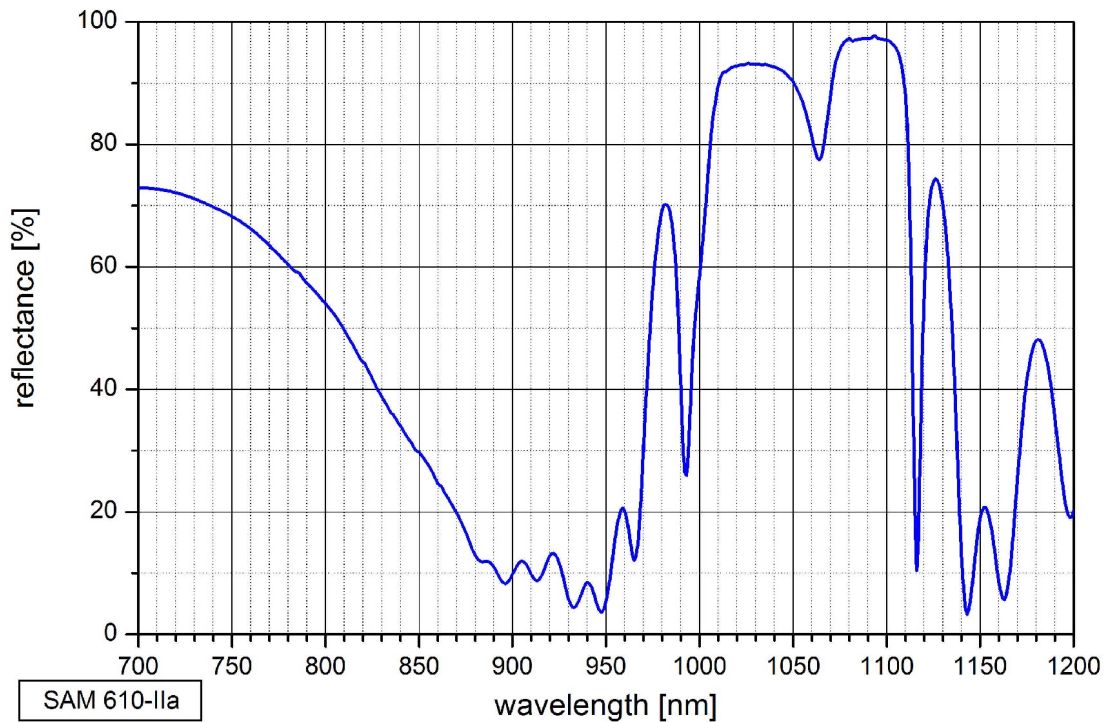
Laser wavelength	$\lambda = 1064 \text{ nm}$
High reflection band (R > 75%)	$\lambda = 1020 \dots 1100 \text{ nm}$
Reflectance at 808 nm	$R_{808} = 50 \%$
Absorbance	$A_0 = 22 \%$
Modulation depth	$\Delta R = 13 \%$
Non-saturable loss	$A_{ns} = 9 \%$
Saturation fluence	$\Phi_{sat} = 49 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 47 \text{ ps}$
Damage threshold	$400 \text{ MW}/\text{cm}^2$
Chip area	4mm x 4mm; other dimensions on request
Chip thickness	400 μm
Dielectric coating	HR @ 808 nm and AR @ 1064 nm

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

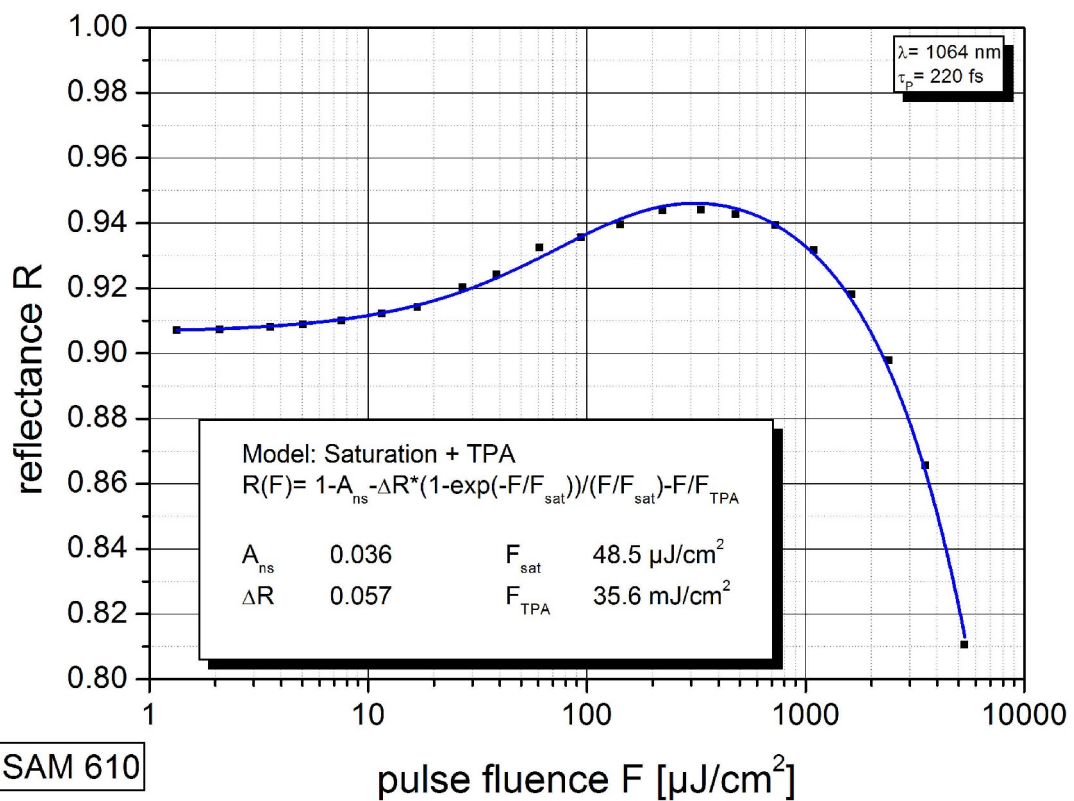
x = 0	unmounted
x = 12.7 g	glued on a copper heat sink with 12.7 mm \varnothing
x = 25.4 g	glued on a copper heat sink with 25.4 mm \varnothing
x = 12.7 s	soldered on a copper heat sink with 12.7 mm \varnothing
x = 25.4 s	soldered on a copper heat sink with 25.4 mm \varnothing
x = 25.4 w	soldered on 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

