

## RSAM data sheet RSAM-974-x, $\lambda = 974 \text{ nm}$

### RSAM - Resonant saturable absorber mirror

Working wavelength	$\lambda = 968 \dots 978 \text{ nm}$ (angle and temperature dependent)
Full Width at Half Maximum	FWHM = 16 nm
Low intensity absorptance	$A = 99 \%$
Low intensity reflectance	$R_{\min} \sim 1 \%$
Saturation fluence	$\Phi_{\text{sat}} = 15 \mu\text{J}/\text{cm}^2$
Relaxation time constant	$\tau \sim 1 \text{ ps}$
Non-saturable loss	$A_{\text{ns}} = 40 \%$
Chip area	4mm x 4mm; other dimensions on request
Chip thickness	400 $\mu\text{m}$
Front side	dielectric cover
Mounting of RSAM-974-x	denotes the type of mounting as follows:
$x = 0$	unmounted
$x = 12.7 \text{ g}$	glued on a gold plated Cu-cylinder with 12.7 mm $\varnothing$
$x = 25.4 \text{ g}$	glued on a gold plated Cu-cylinder with 25.4 mm $\varnothing$
$x = 12.7 \text{ s}$	soldered on a gold plated Cu-cylinder with 12.7 mm $\varnothing$
$x = 25.4 \text{ s}$	soldered on a gold plated Cu-cylinder with 25.4 mm $\varnothing$
$x = \text{FC}$	mounted on a 1 m monomode fiber cable with FC/PC connector
$x = \text{FC/PC with TEC}$	mounted on a 1 m monomode fiber cable with FC/PC or other connector type and TEC (thermoelectric cooler) for fine tuning of the resonance wavelength

### Unsaturated spectral reflectance, measured at room temperature with 7° angle of incidence



