

## MICA RETARDERS

We manufacture and stock  $\frac{1}{4}$ -wave and  $\frac{1}{2}$ -wave retarders in common laser wavelengths, cemented between protective glass cover plates. We do not AR coat mica retarders, as internal transmittance is  $\sim 85\%$ . However, mica retarders are very high quality plates, with uniform retardance across the aperture, and wavefront distortion  $< \frac{1}{4}$ -wave. Because of the natural absorption of mica, insertion losses become quite high with increasing wavelength (the plate becomes thicker). Thus, for practicality, we do not recommend mica retarders beyond  $\sim 850$  nm. Mica Retarders are guaranteed to be accurate within 1% of peak value.



$\lambda/4$ -wave* Catalog Number	$\lambda/2$ -wave* Catalog Number	Wavelength	Bandwidth	Field of View	Temperature Stability
RA- $\frac{1}{4}$ -488	RA- $\frac{1}{2}$ -488	488 nm	$\pm 6$ nm	$> \pm 2^\circ$	$< 0.1$ nm/ $^\circ\text{C}$
RA- $\frac{1}{4}$ -514	RA- $\frac{1}{2}$ -514	514 nm	$\pm 6$ nm	$> \pm 2^\circ$	$< 0.1$ nm/ $^\circ\text{C}$
RA- $\frac{1}{4}$ -633	RA- $\frac{1}{2}$ -633	633 nm	$\pm 6$ nm	$> \pm 2^\circ$	$< 0.1$ nm/ $^\circ\text{C}$
RA- $\frac{1}{4}$ -670	RA- $\frac{1}{2}$ -670	670 nm	$\pm 6$ nm	$> \pm 2^\circ$	$< 0.1$ nm/ $^\circ\text{C}$
RA- $\frac{1}{4}$ -780	RA- $\frac{1}{2}$ -780	780 nm	$\pm 6$ nm	$> \pm 2^\circ$	$< 0.1$ nm/ $^\circ\text{C}$

\*value assumes a tolerable phase retardation error of 1%

## MECHANICAL SPECIFICATIONS

Material	Mica between glass
Retardance	$\pm 1\%$
Parallel	2 minutes