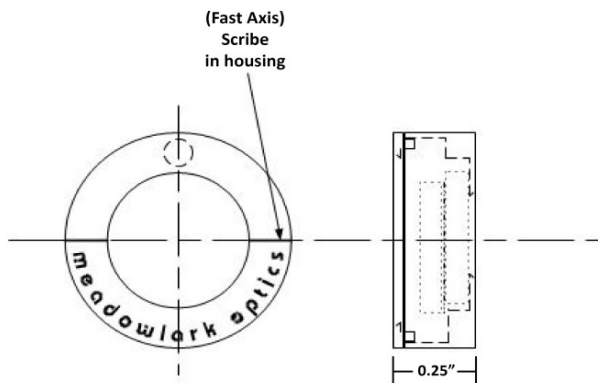
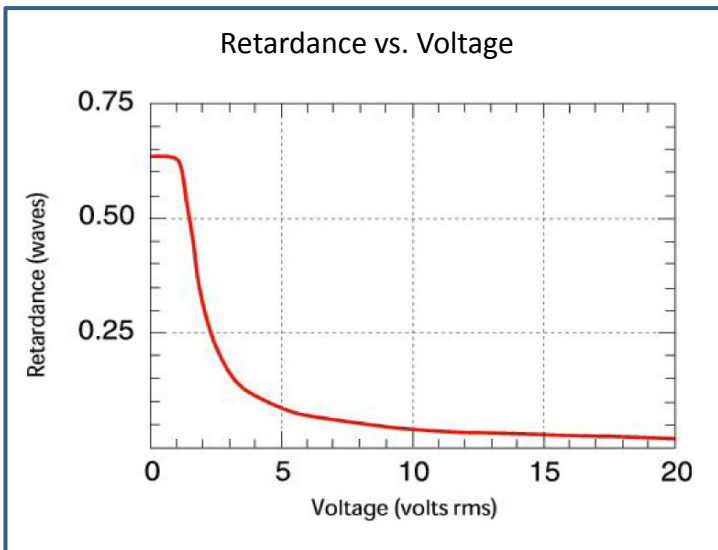


## OEM Liquid Crystal Variable Retarder

Meadowlark Optics is pleased to announce a small, mounted liquid crystal family of products intended for space constrained or OEM applications. By removing the temperature control circuitry, the overall dimensions of the housing can be significantly reduced. For even tighter mechanical constraints, un-mounted cells are also available with flying leads or custom connectors.



### OEM LCVR Features

- Precision control at lower cost
- Scalable quantities
- Thin housing
- Large clear aperture
- Usable from 450 to 1800 nm

SPECIFICATIONS	
Retarder Material	Nematic liquid crystal
Substrate Material	Optical quality synthetic fused silica
Wavelength Range	450-1800 nm (specify)
Retardance Range	~30 nm to $\lambda/2$ custom ranges are available
Transmitted Wavefront Distortion	$\lambda/2$ (P-V @ 633) [ $\lambda/8$ (RMS @ 633)]
Surface Quality	80-50 scratch-dig
Beam Deviation	3 arc min
Reflectance (per surface)	0.5% at normal incidence
Diameter Tolerance	$\pm 0.005$ in.
Temperature Range	0°C to 50°C
Laser Damage Threshold	500 W/cm <sup>2</sup> , CW 300 mJ/cm <sup>2</sup> , 10 ns, visible

ORDERING INFORMATION			
Diameter (in.)	Clear Aperture (in.)	Thickness (in.)	Part Number
1.00 [25.4 mm]	0.49 [12.5 mm]	0.25 [6.35 mm]	LVT - 100
We offer standard liquid crystal variable retarders to cover four spectral regions:			
VIS: 450 – 700 nm		IR 1: 650 – 950 nm	
IR 2: 900 – 1250 nm		IR 3: 1200 – 1700 nm	
<i>Please specify a spectral region when placing your order.</i>			