OPTICAL COMPONENTS

Spherical Lenses Cylindrical Lenses

Quartz Depolarizers

- · Thoroughly scrambles a polarized beam to make it appear unpolarized
- Available in both single and double wedge configurations
- Made from the finest optical quality crystalline quartz
- Single wedge form has transmission from 180nm to 4500nm
- Mounted in metal ring for convenience

These quartz wedges scramble the polarization of an impinging beam of light and render it substantially depolarized. We offer a single wedge and a double wedge. The single wedge introduces a deviation in the beam of light. By cementing two wedges together it is possible to reduce the beam deviation to less than 10arcmin. However, this is achieved at the expense of broad band transmission since an index-matched optical cement must be used. Both types are 17mm square and are mounted in a 30mm diameter metal cell.

Specifications & Tolerances

Dimensions: +0, -0.2mm Material: Crystal quartz Coating: 1 piece — none 2 piece — Single layer Anti-Reflection Surface flatness: $\lambda/10$ Retardation: $\lambda/2$ Mounting: Black finished aluminum Wavelength range: 1 piece — 180-3500nm 2 piece — 350-2500nm

DEQ

1N



Quartz Depolarizers

Type Cell	Diameter, D (mm)	Side, a (mm)	Thickness, t (mm)	Price	PART NUMBER
1 piece	30.0	17.0	2.5		068-6690
2 piece	30.0	17.0	4.4		068-6770

Lens Kits Achromatic Doublets Multi-Element Micro Optics Mirrors Prisms Substrates & Windows Beamsplitters Polarizers

Filter & Apertures

'Depolarizers' should probably be more properly called 'randomizers' since they do not, in fact, depolarize a beam. Rather they cause the beam to be made up of a large range of continuously varying and intermixed polarization angles. This is usually entirely satisfactory for most applications but care should be taken to not restrict the aperture for this will reduce the effect considerably.

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