

Optically Contacted Zero Order Waveplate

Optically Contacted zero order waveplate is constructed by two guartz plates with their fast axis crossed, the two plates are constructed by optically contacted method, the optical path is epoxy free. The difference in thickness between the two plates determines the retardance. Zero order waveplates offer a substantially lower dependence on temperature and wavelength change than multi-order waveplates.

- ★ High Damage Threshold
- ★ Better Temperature Bandwidth
- ★ Wide Wavelength Bandwidth
- ★ Both Sides AR Coated



Specifications

Material Crystal Quartz **Dimension Tolerance** +0.0/-0.2mm

Surface Quality 20/10 scratch and dig >90% central area Clear Aperture Wavefront Distortion <λ/8@632.8nm Parallelism(for single plate) <1 arc second

Retardation Tolerance $< \lambda / 300$

AR Coating R<0.25%@central wavelength

Damage Threshold >5J/cm2, 20ns, 20Hz @1064nn

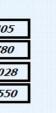
| | | | Ze | ro Ord | ler Wa | vepla | te 532 | nm | | | |
|--|-----|-----|-----|--------|-----------|-----------------|--------------|-----|-----|-----|-----|
| 0.56 0.53 0.50 0.47 (V) 0.44 0.36 0.36 0.36 | | | | | | N2 | | | | _ | |
| 0.25 0.25 0.25 0.25 | | | | | λ/4 | | | | | | |
| 1 | 482 | 492 | 502 | 512 | 522 Wa | 532 velength | 542 n(nm) | 552 | 562 | 572 | 582 |

Optical Axis

Standard Retardation: half and quarter waveplate Standard Wavelength:

| 213 | 248 | 266 | 308 | 355 | 405 | |
|------|------|------|------|-------|------|--|
| 488 | 515 | 532 | 546 | 632.8 | 780 | |
| 795 | 800 | 852 | 894 | 980 | 1028 | |
| 1030 | 1047 | 1053 | 1064 | 1310 | 1550 | |

Custom Waveplate: Upon Request





Half Waveplate



Quarter Waveplate

Optical Axis



