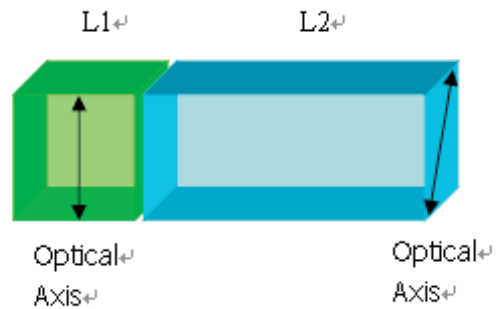


LYOT DEPOLARIZER

Optical depolarizer is a kind of optical passive component which can transform the input polarized or partial polarized light into non-polarization light (depolarization), it is designed according to Lyot depolarizer's principle.

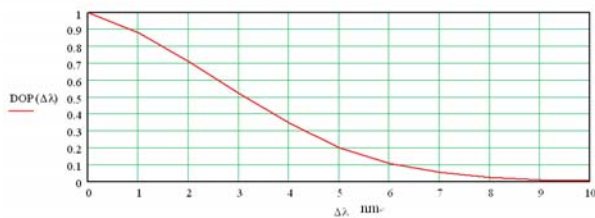
Dayoptics Lyot depolarizer consists of two crystalline plane parallel plates whose axes is 45° apart from each other with optical contacted. The thickness ratio of two plates length is typically 2:1. The depolarization is created by the superposition of the circularly, elliptically and linearly polarized light in different wave-lengths. The depolarizer is not suitable for usage in monochromatic light.



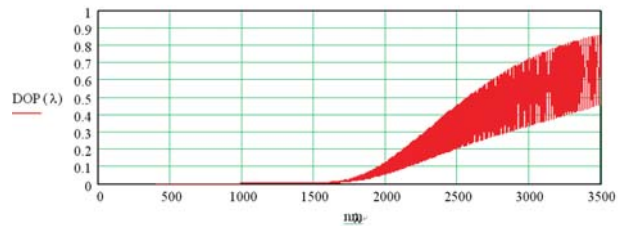
Theory Data

DOP - Degree of Polarization, DOP=1 good polarization, DOP=0 good depolarization

Material: Calcite

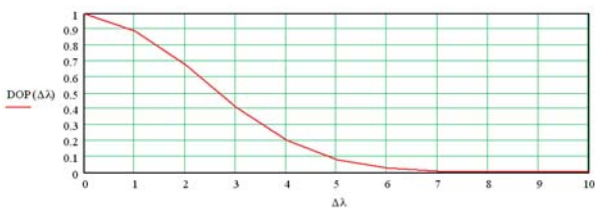


DOP Vs. wavelength bandwidth
Laser beam Wavelength is 1550nm, with total length of 6mm

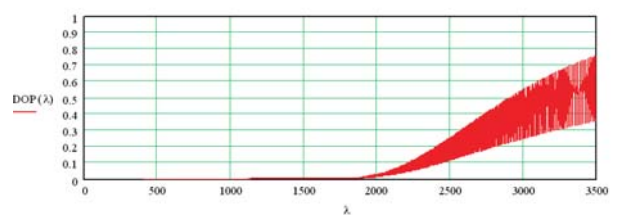


DOP Vs. input wavelength
(Input beam with 10nm bandwidth, total length 6mm)

Material: YVO4

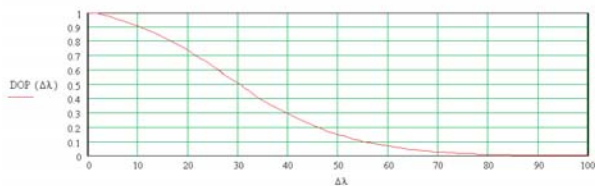


DOP vs. wavelength bandwidth
Laser beam Wavelength is 1550nm, with total length of 6mm

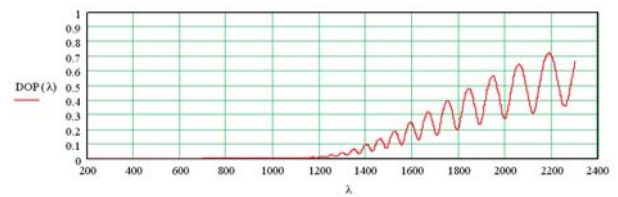


DOP Vs. input wavelength
(Input beam with 10nm bandwidth, total length 6mm)

Material: Quartz



DOP Vs. wavelength bandwidth
Laser beam Wavelength is 1064nm, with total length of 6mm



DOP Vs. input wavelength
(Input beam with 100nm bandwidth, total length 6mm)



LYOT DEPOLARIZER

Specifications

Material: Calcite, YVO₄, Quartz

Wavelength Range: Calcite: 350-2300nm, YVO₄: 500-4000nm, Quartz: 200-2300nm

Dimension: +0/-0.2mm

Parallelism: <20 arc second

Flatness: $\lambda/10$ @633nm

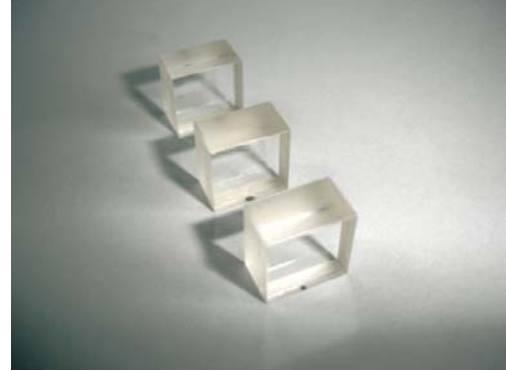
Surface Quality: 20/10

Surface contact method: Optical contact

Coating is available upon requirement

Mount is available upon requirement

Total Length: 6mm



Part No	Material	Aperature	Total Length	Unit Price
DPL7005	CaCO ₃	5X5mm	6mm	\$180
DPL7010	CaCO ₃	10X10mm	6mm	\$250
DPL8005	YVO ₄	5X5mm	6mm	\$260
DPL8010	YVO ₄	10X10mm	6mm	\$320
DPL9005	Quartz	5X5mm	6mm	\$150
DPL9010	Quartz	10X10mm	6mm	\$220

