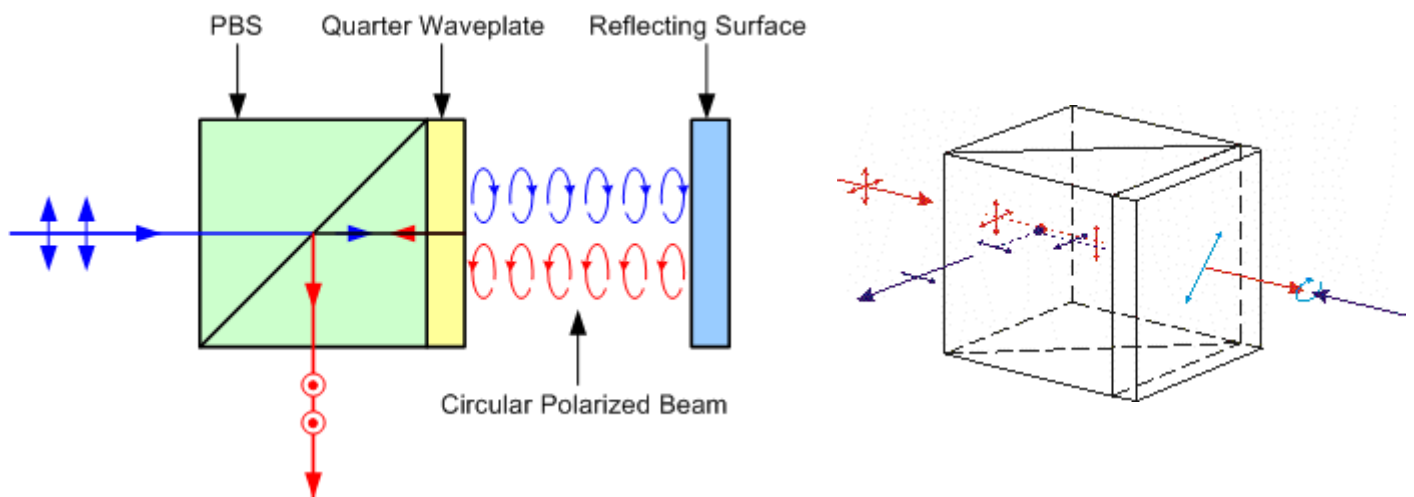
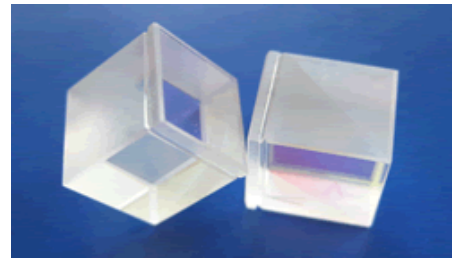


Optical Isolator

Optical isolator is a combination of a polarization Beamsplitter cube (PBS) and a quarter waveplate made of crystal quartz. Incident light is linearly polarized by PBS and converted to circular polarization by the quarter waveplate. If any portion of the emerging beam is reflected back into the isolator, the quarter waveplate will convert the reflected beam into a linearly polarized beam which is perpendicular to the input beam. This beam is then blocked by PBS and it will not return to the input side of the system.

Features:

- Block optical feedback
- Passive isolation of linearly polarized light
- High isolation
- RoHS Compliant



Specifications:

Material	Crystal Quartz & BK7
Dimension Tolerance	+/-0.2mm
Transmitted Wavefront Distortion	$\lambda/4@632.8\text{nm}$
Beam Deviation	<math><3</math> arc minutes
Surface Quality	60/40 scratch and dig
Clear Aperture	>85% central area
Isolation	>20dB
PBS Coating	$T_p > 95\%$ and $T_s < 1\%$ $R_s > 99\%$ and $R_p < 5\%$
AR Coating	$R < 0.25\%$ @ central wavelength on all entrances
Damage Threshold	500mJ/cm ² , 20ns, 20Hz @ 1064nm 100W/cm ² , CW at 1064nm