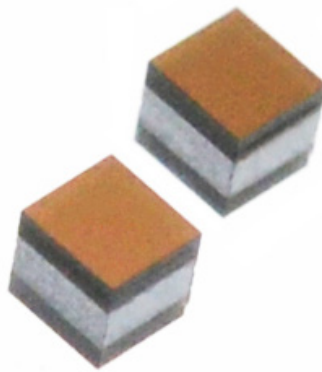


# FREE SPACE ISOLATOR

Coherent's Free Space Isolators cores are used in various TOSAs, which require isolation to prevent feedback into the laser. This product is available in single and double stage designs. The Free Space Isolators offer excellent performance with low insertion loss and high isolation. Coherent's proprietary process, combined with 15+ years of volume manufacturing experience and high level capacity, results in a high reliability record.

We are providing various types FSIs including latching, non-latching; single stage, dual stage; core and assemblies. Typical assemblies include magnet rings, SMT, receptacles, Fiber array and relative cables.



## FEATURES

- High Isolation
- Low Insertion Loss
- Compact Size
- Environmental Stable
- RoHS Compliant

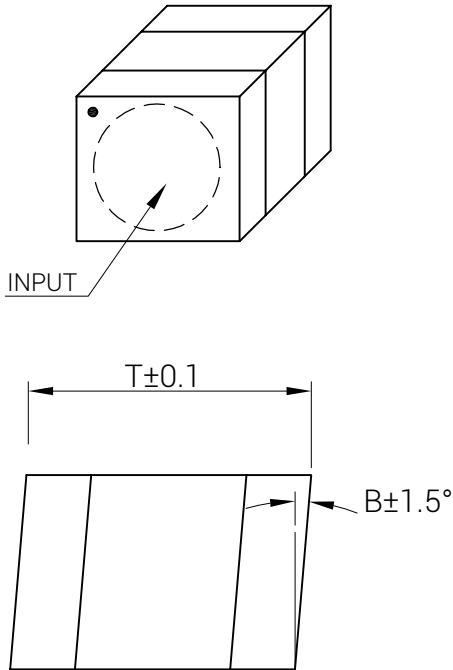
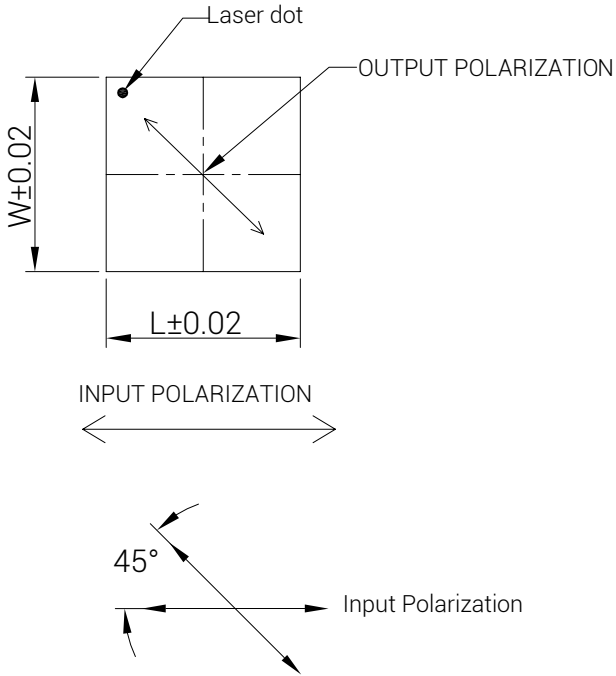
## APPLICATIONS

- Optical Transmitter
- Fiber Laser
- Tunable Laser

Specifications

| Parameter                         |      | Unit | Single Stage              | Dual Stage |
|-----------------------------------|------|------|---------------------------|------------|
| Operating Central Wavelength (°C) |      | nm   | 1310, 1550 or customized  |            |
| Wavelength Range                  |      | nm   | CL ±20 or customized      |            |
| Isolation                         | Min. | dB   | 20                        | 40         |
| Insertion Loss                    | Max. | dB   | 0.4                       | 0.60       |
| Size                              |      | mm   | 0.45 x 0.45 or customized |            |
| Operating Temperature             |      | °C   | -5 ~ 75                   |            |
| Storage Temperature               |      | °C   | -40 ~ 85                  |            |

Note  
 1. This is typical Specification. The size, wavelength, operating temperature and other configurations can be customized. Refer to Ordering Information.  
 2. Isolation and Insertion loss are specified over operating temperature and wavelength range, will varies with operating range.



**Ordering Information**

XXXX – XXXX – X\*X – XX – X – XX

Category A B C D E

| Category | Construction          |   |
|----------|-----------------------|---|
|          |                       | KPGP=Non-latching FSI Core single stage<br>KPMP=Latching Core single stage<br>KPGPGP=Non-latching FSI Core dual stage<br>KPMPMP=Latching Core dual stage<br>KPMPW=Latching Core single stage with wave plate<br>KPGW=Latching Core 1 polarizer with wave plate<br>Others=characters in sequence indicate material of layers |
| A        | Center Wavelength     | 1310 = 1310 nm<br>1550 = 1550 nm<br>XXXX = XXXX nm  |
| B        | Size (mm)             | 0.45*0.45 = 0.45*0.45 mm<br>L*W = L*W mm  |
| C        | Coating               | AA = Both side AR<br>AU = Input side AR<br>UA = Output side AR<br>UU = No coating   |
| D        | Angle                 | 0 = 0°<br>A = A°  |
| E        | Polarization Rotation | CW = Clockwise<br>CC = Counter Clockwise  |

**Appendix**

Free Space Isolator in other configuration is also available. Some typical configuration as below.

