

# 4500-4600nm Faraday Isolators

Newport's 4500-4600nm Faraday Isolators rotate the plane of polarized light 45° in the forward direction and an additional 45° of non-reciprocal rotation in the reverse direction while maintaining the light's linear polarization. The Faraday Isolator shields lasers from destabilizing and potentially destructive back-reflected light from interfaces on downstream optics or back-scattered ASE from optical amplifiers. Based on high Verdet constant rotating material and developed to work with up to 2.5W of average input power in the 4500-4600nm wavelength range, Newport isolators provide the ultimate protection for polarized output from Quantum Cascade Lasers (QCLs).



## Benefits:

- Eliminate frequency instability in QCLs
- Prevent optical damage to QCLs due to back reflections

## Features:

- Rugged design suitable for harsh operating environments
- Optional  $\lambda/2$  plate available for all isolators

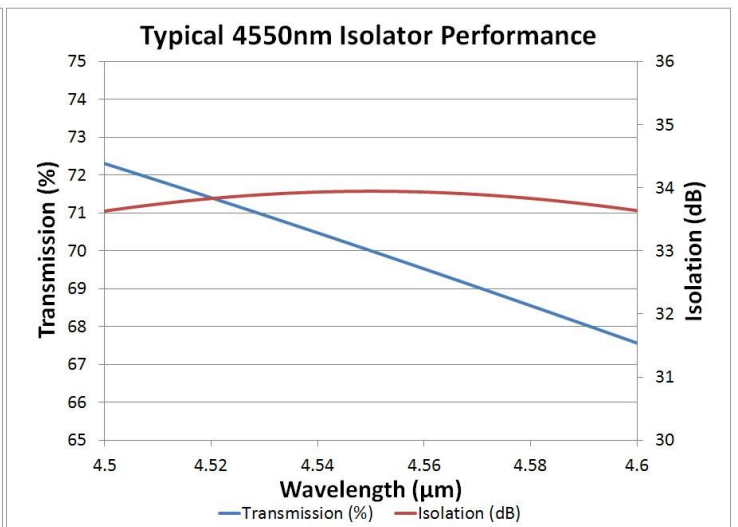
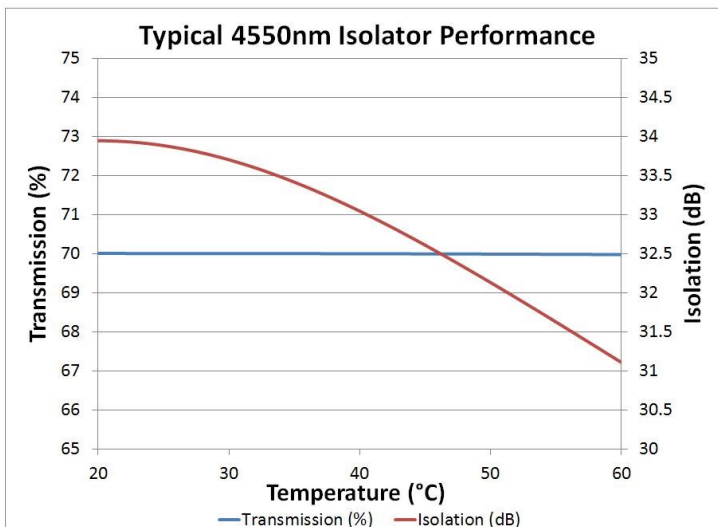
## Specifications<sup>a, b</sup>:

	ISO-FRDY-04-4550 <sup>c</sup>
Transmission at 22°C (%)	>65
Isolation at 22°C (dB)	>30
Power Handling (W)	2.5

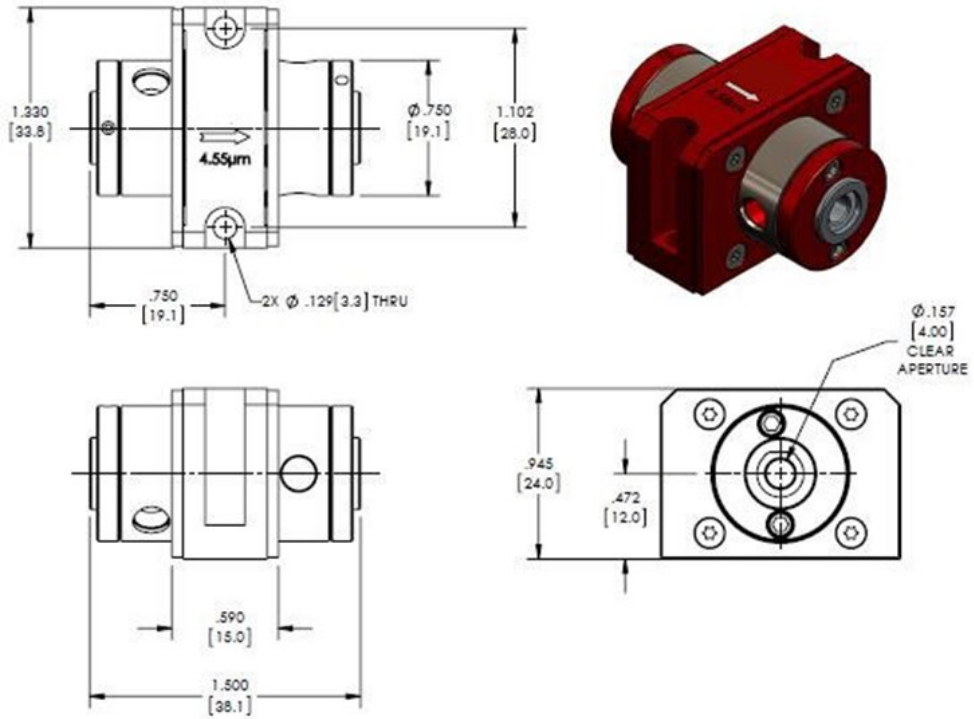
<sup>a</sup> Product specifications are subject to change.

<sup>b</sup> Return Loss-free working distance  $\geq 25$ mm for a collimated beam.

<sup>c</sup> RoHS compliant.



# 4500-4600nm Isolator Dimensions<sup>a</sup>:



<sup>a</sup> All dimensions in inches