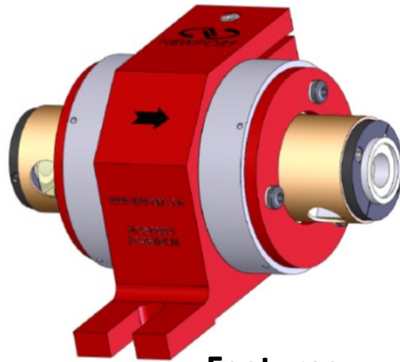


Broadband Faraday Isolators for Ti:Sapphire Lasers

Newport's Broadband Isolators rotate the plane of polarized light 90° at 800nm in the forward direction and 0° from 720-950nm in the reverse direction while maintaining the light's linear polarization. Broadband Faraday Isolators provide high transmission in the forward direction and strongly attenuates back-reflected light between 720-950nm in the reverse direction protecting Ti:Sapphire oscillators from the deleterious effects of back reflections and also eliminating preferential lasing at the lower gain wavelengths of Ti:Sapphire lasers. Utilizing optics with low refractive indices and short optical pathlengths minimizes pulse broadening due to dispersion in the optics associated with ultra-short laser pulses.



Benefits:

- Eliminate ASE from high-gain amplifiers that can cause parasitic or relaxation oscillations
- Prevent preferential lasing at low-gain wavelengths by providing broadband isolation

Features:

- All devices are completely passive; no tuning is required
- Combination of low refractive index optics and short optical pathlengths minimizes pulse broadening that can be associated with ultra-short pulses
- All isolators contain escape ports; all rejected beams are deflected at 90°

Specifications^a:

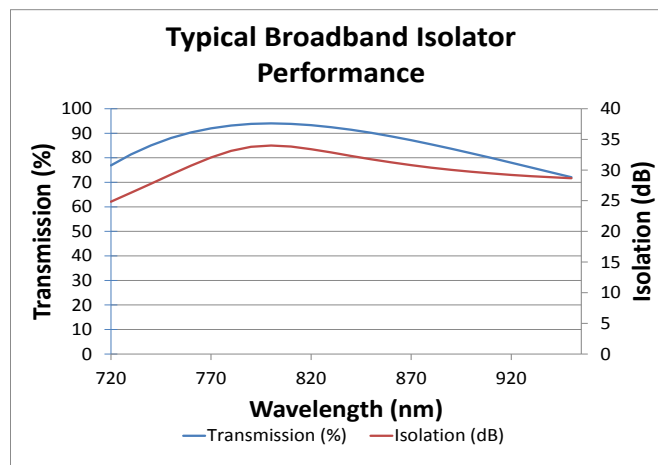
	ISO-05-800-BB ^b	ISO-08-800-BB ^b
Center Wavelength (nm)	800	800
Spectral Range (nm)	720-950	720-950
Polarizer Type	PBS Cube	PBS Cube
Transmission at 22°C (%) ^c	>92	>92
Isolation at 22°C (dB)	>30	>30
Pulsed Damage Threshold ^d	1J/cm ² at 10ns	1J/cm ² at 10ns

^a Product specifications are subject to change.

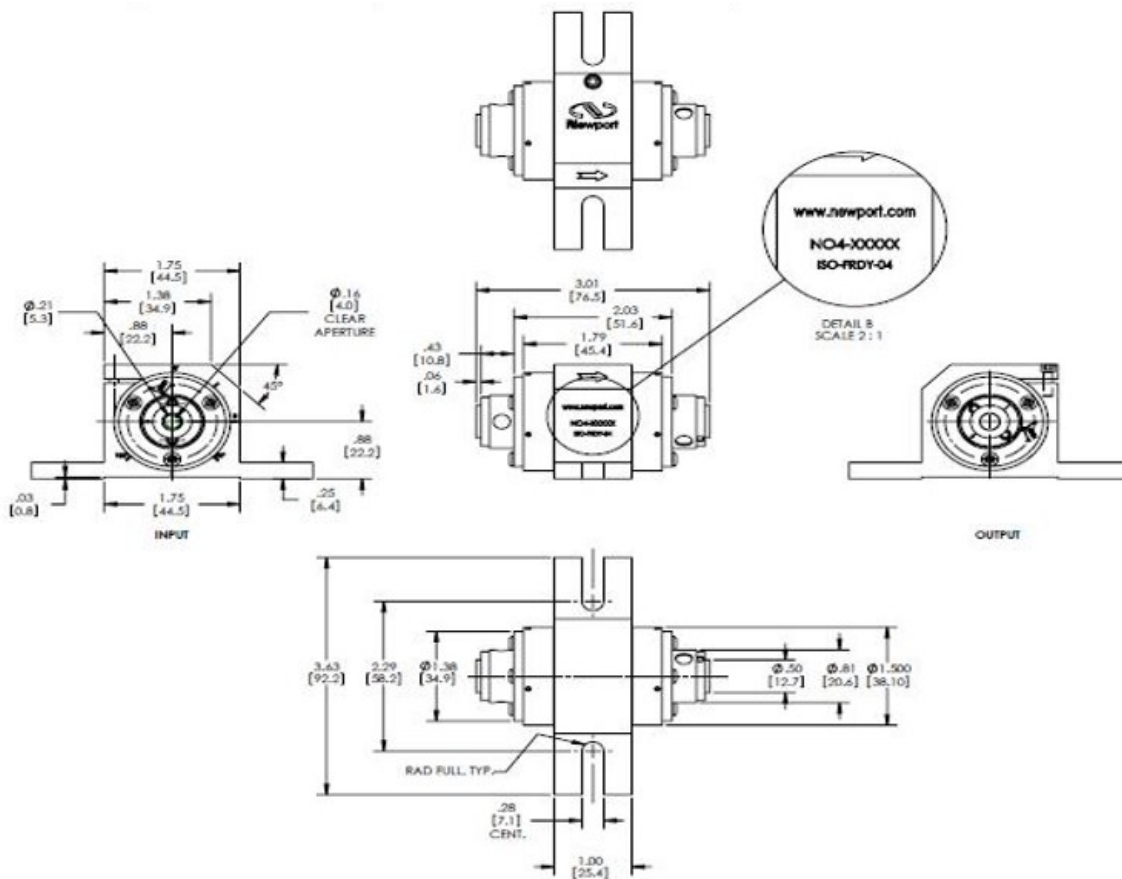
^b RoHS compliant.

^c At center wavelength.

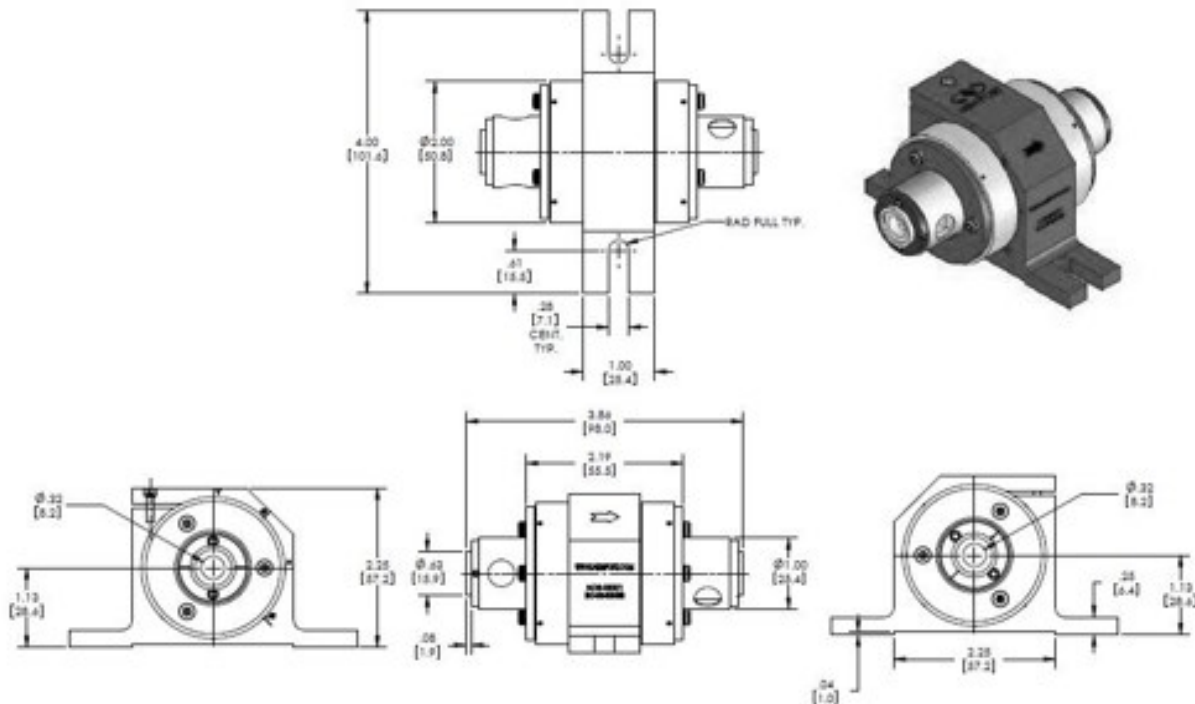
^d CW damage threshold is 2kW/cm².



5mm Broadband Isolator Dimensions^a:



8mm Broadband Isolator Dimensions^a:



^a All dimensions in inches