## FastPulse Technology, Inc.

LASERMETRICS® DIVISION 220 Midland Ave., Saddle Brook, NJ 07663 TEL: 973-478-5757 · FAX: 973-478-6115 Web Site: www.fastpulse.com OPTICAL ISOLATORS SERIES 2110 IR 1.75-3.4 µm

FastPulse Technology's Optical Isolator product line is designed for today's new laser wavelengths and power levels. These robust 2  $\mu$ m region isolators have been designed with regard to absorption bands in this region. In the past decade numerous advances have made lasers in this region practical for many new applications. The 1.75-3.4  $\mu$ m range requires several types of Faraday rotator materials. Each material used in this series has properties enabling isolator design optimization. The polarizer choices likewise are based on the wavelength of interest. It is not possible to list all the possible design options for this region. Please contact us and we will quickly configure our designs for your wavelength of interest.

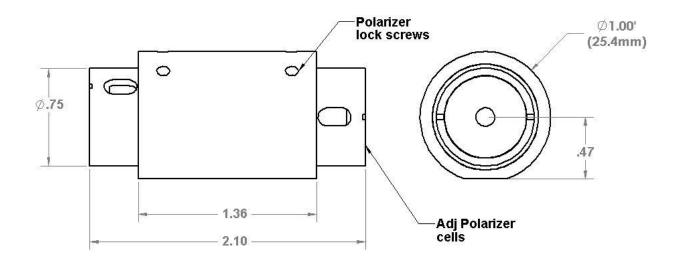


Isolation values typically exceed 30 dB at the center wavelength. Materials used have been selected for lowest absorption and scatter. Magnetic fields required in this region are modest, often <1500 gauss. The associated magnets allow most designs to be accommodated in a 25.4 mm diameter housing. Custom Isolators are quoted and built to order. OEM designs can be optimized for smallest size. These isolators include models unique to the market. FastPulse Technology also offers competitive OEM isolator models for the 405 nm to 1064 nm region

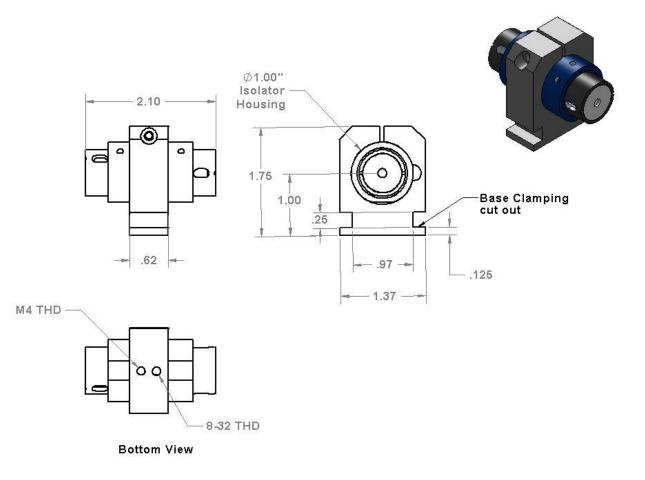
Wavelength	1940 nm	1993 nm	2050 nm
Part Number (2110)	ISO-5-1940-HP	ISO-3-1993-MP	ISO-8-2050-HP
Aperture	4.5 mm	3 mm	8 mm
Bandwidth	1880-1970 nm	1950-2030 nm	2030-2090 nm
Power	10 W	5 W	10 W
Isolation	35-40 dB	34-40 dB	30-37 dB
Transmission	86-90%	89-93%	85-89%

FastPulse Technology's 2.3--3.4 µm region isolators include standardized designs for uncommon wavelengths. Optional crystal polarizers MP series allow for higher power handling isolators. AP series absorptive polarizers provide low cost for low power applications.

Wavelength	2450 nm	2900 nm	3390 nm
Part Number (2110)	ISO-5-2450-AP	ISO-5-2900-AP	ISO-4-3390-MP
Aperture	4.5 mm	4.5 mm	4 mm
Bandwidth	2350-2550 nm	2750-3000 nm	3350-3450 nm
Power	200 mW	200 mW	2 W
Isolation	28-35 dB	28-35 dB	28-33 dB
Transmission	87-92%	82-89%	80-85%



SERIES 2110 - 1 inch OD ISOLATOR WITH POLARIZER CELLS ATTACHED (Maximum length with high power polarizers is shown)



## ISOLATOR WITH POLARIZERS - MOUNTED ON BASE CLAMP STANDARD BASE CLAMPS ARE SUPPLIED WITH ALL ISOLATORS