LARGE APERTURE FREE SPACE OPTICAL ISOLATORS

DESCRIPTION

Based on a Faraday Rotator made of Terbium Gallium Garnet single-crystal (TGG), these isolators provide superior performance with lasers in the 980 and 1064nm wavelength ranges. Units include a mounting collar for easy bench mounting and alignment to the polarization plane of a laser.

These models are available in low, medium and high power versions for continuous-wave and pulse applications. The high power versions use calcite Glan Taylor polarizers with two AR coated escape ports. The medium power option uses standard Glan Taylor polarizers. For low power applications, a special high-performance glass polarizer is offered.

FEATURES

- High Isolation
- Low Insertion Loss
- Various Power Options
- Easily Aligned to Source
- Easily Tuned
- 2 and 5mm Clear Aperture

APPLICATIONS

- Semiconductor Laser Modules
- Optical Test Instrumentation
- Optical Instrumentation

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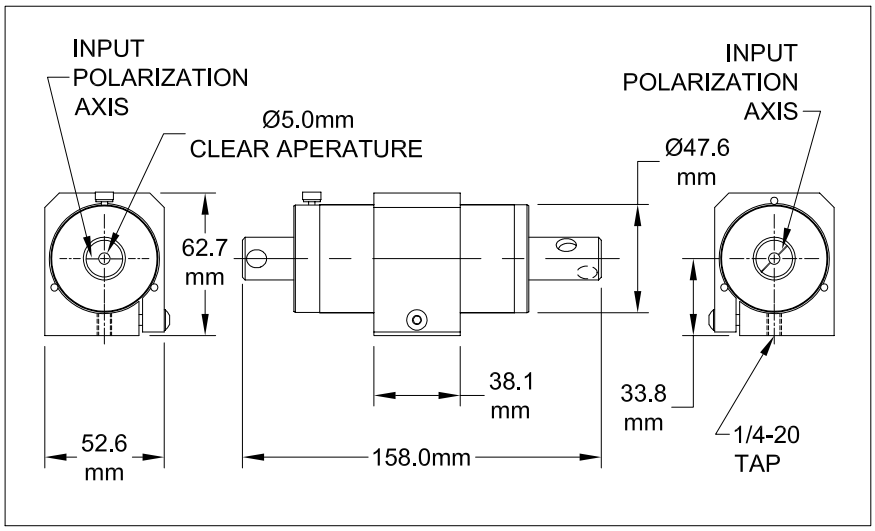
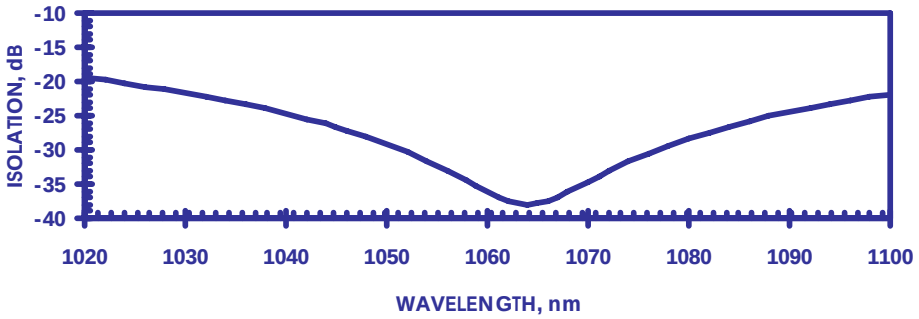
OUTLINE DRAWING



THEORETICAL ISOLATION CURVE

Model # I-106T-5 tuned at 1064nm



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SPECIFICATIONS

	I-98-2	I-106-2	I-98T-5	I-106T-5
Isolation (typical)	≥40dB			
Isolation (minimum)	35dB			
Insertion Loss (typical)	≤0.4dB		≤0.6dB	≤0.5dB
Insertion Loss (maximum)	0.6dB		0.9dB	0.7dB
Clear Aperture	2mm		5mm	
Tunable	Factory Tuned[1]		Yes	
Tuning Range	970-990nm	1040-1090nm	950-1030nm	1040-1090nm
Polarization of Input	Indicated on Polarizer Housing			
Polarization of Output	45° from Input			
Optical Path Length Low Power Medium Power High Power	 110.1mm 154.1mm 181.0mm	 127.1mm 134.4mm 187.0mm	 139.7mm 147.0mm 199.6mm	
Housing Diameter	34.9mm		60.3mm	
Polarizer Type Low Power Medium Power High Power	 Dichroic Glass Glan Taylor Glan Taylor with Dual Escape Ports			

[1] Specify desired wavelength for factory tuned.
For custom configurations or specifications, please contact an ISOWAVE sales engineer.

ORDERING INFORMATION

I — [ ][ ][ ] — [ ] — [ ] — [ ][ ][ ]

- [ ]: 98=980nm; 106=1064nm
- [ ]: T=Tunable; Leave Blank for Factory Tuned
- [ ]: 2=2mm aperture; 5=5mm aperture
- [ ]: L=Low Power; M=Medium Power; H=High Power

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