

Large Aperture Optical Isolator



DESCRIPTION

Our Large Aperture free space isolators are available in a wide variety of wavelengths and can be purchased factory-tuned to a particular wavelength or user-tunable. These isolators offer high isolation with a choice of low, medium and high power capability. Any of these units can also be purchased without polarizers as a Faraday Rotator.

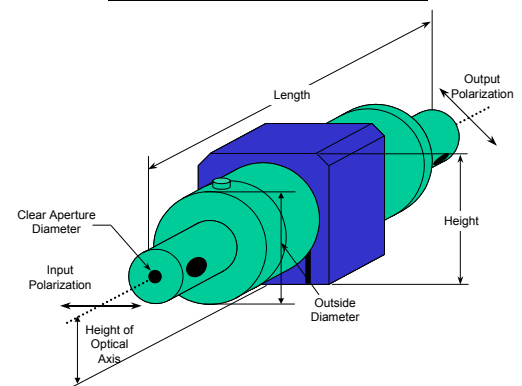
APPLICATIONS

- Preservation of Laser Signal Integrity
- Amplifiers
- Test & Measurement Equipment
- Metrology or Quality Control

FEATURES

- Superior Performance and Reliability
- High Isolation / Low Insertion Loss
- Low, Medium and High Power Options
- High Power Models with Exit Ports for Return Signal Monitoring or Beam Injection
- User Tunable or Factory Tuned
- Wide Tuning Range

SAMPLE DIAGRAM



SPECIFICATIONS	Wavelengths								
	400-500nm	500-600nm	600-700nm	700-900nm	930-1020nm	1040-1190nm	1250-1400nm	1460-1620nm	1900-2200nm
Typical Wavelength Ranges	400-500nm	500-600nm	600-700nm	700-900nm	930-1020nm	1040-1190nm	1250-1400nm	1460-1620nm	1900-2200nm
Clear Aperture	2mm, 4mm, 5mm							4mm, 5mm	
Peak Isolation (typical)	≥ 40db								
Insertion Loss (typical)	~ 0.5dB	~ 0.5dB	~ 0.5dB	~ 0.5dB	~ 0.4dB	~ 0.5dB	~ 0.2dB	~ 0.2dB	~ 0.2dB
Operating Temperature Range	0°C ~ + 55°C								
Storage Temperature Range	-40°C ~ + 85°C								
Maximum Power Density *	Medium Power (50W/cm ² CW & 50MW/cm ² pulsed), High Power (250W/cm ² CW & 500MW/cm ² pulsed)								
Polarization Input/Output **	Typically 45°								
*	Check with factory for low power polarizer densities and pulsed condition ratings								
**	Except Broad Band models which offer 90° rotation								

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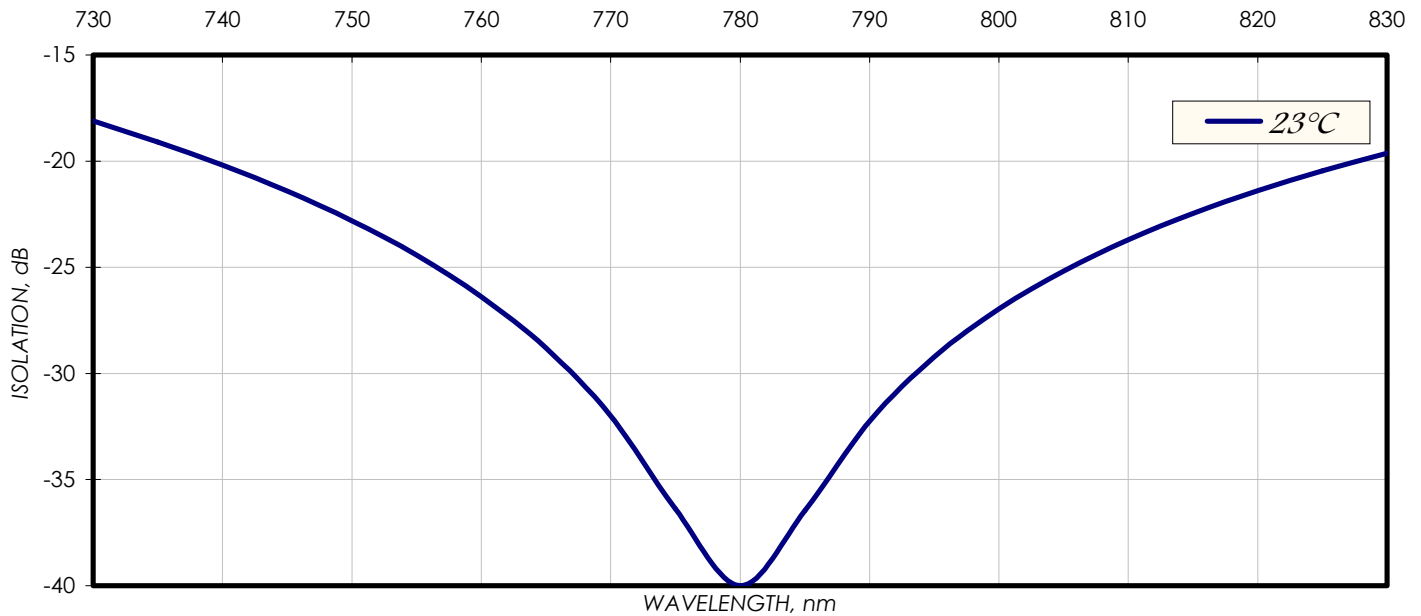
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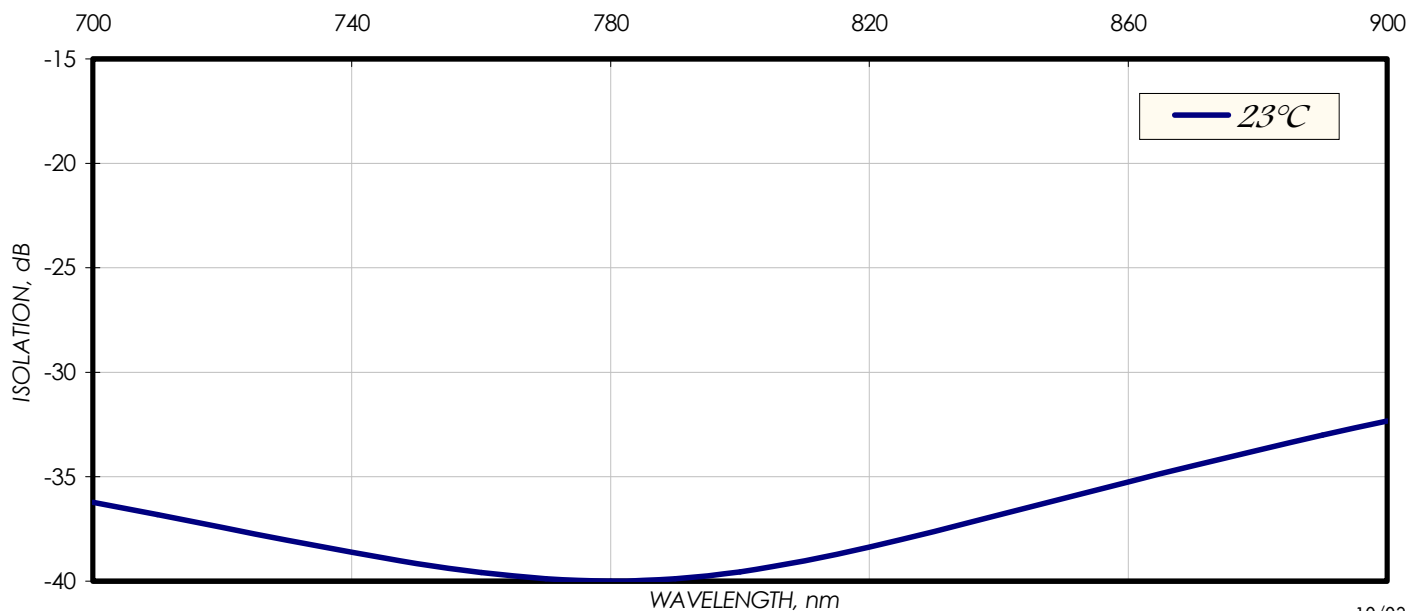
THEORETICAL ISOLATION CURVE

TYPICAL SINGLE STAGE



THEORETICAL ISOLATION CURVE

TYPICAL BROAD BAND SINGLE STAGE



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