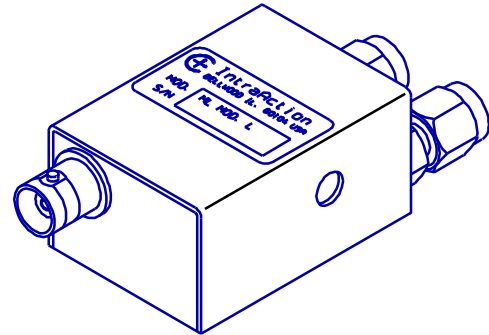


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**MODEL MLR SERIES
MODE LOCKER FOR Ti:Sapphire LASER**

- CONCURRENT CW MODE SUPPRESSION
- SHORT OPTICAL PATH LENGTH
- LOW ACOUSTIC Q
- USER SPECIFIED FREQUENCY
- REGENERATIVE LASER SYSTEMS
- CUSTOM DESIGNS AVAILABLE¹
- HIGH RELIABILITY



SPECIFICATIONS

Material	Schlieren Grade Fused Silica
Material Path Length	1.5 cm
Window Configuration ²	User specified
Wavelength Range ³	700 - 1100 nm
Optical Insertion Loss	< 0.5 percent
RF Frequency ⁴ (nominal)	User specified up to 150 MHz
RF Bandwidth	+/- 15 percent
Mode Spacing	330 kHz or 460 kHz (nominal)
Mode Bandwidth (-3 dB)	200 kHz (near center RF frequency)
Loss Diffraction Efficiency ⁵	50 percent
RF Drive Power ⁵	5 Watts
Sound Field Height ⁶	3 mm
Laser Polarization	Linear (parallel to mounting surface)
Size (less connectors)	1.98 D x 1.01 H x 1.19 L inches 5.03 D x 2.57 H x 3.03 L cm
Temperature Stabilization ⁷	Water Cooling

MODEL

	<u>MLR-403DB23</u>	<u>MLR-403BB10</u>
RF Frequency	40 MHz (nominal)	40 MHz (nominal)
Active Aperture	2 mm	3 mm
Window Configuration ²	Brewster	2 ⁰ rhomboid
Wavelength Range	700 - 1100 nm	700 - 900 nm

¹ Specify RF frequency, optical beam diameter, window configuration, and optical wavelength or range.

² Rhomboid, wedge, or Brewster.

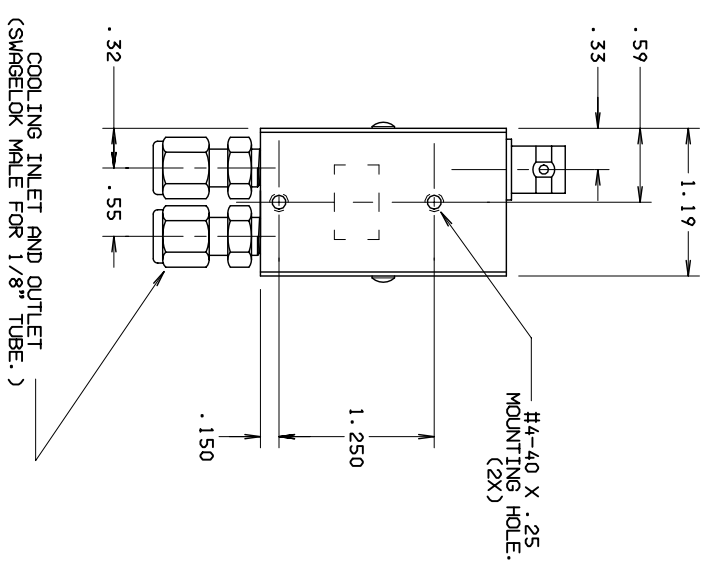
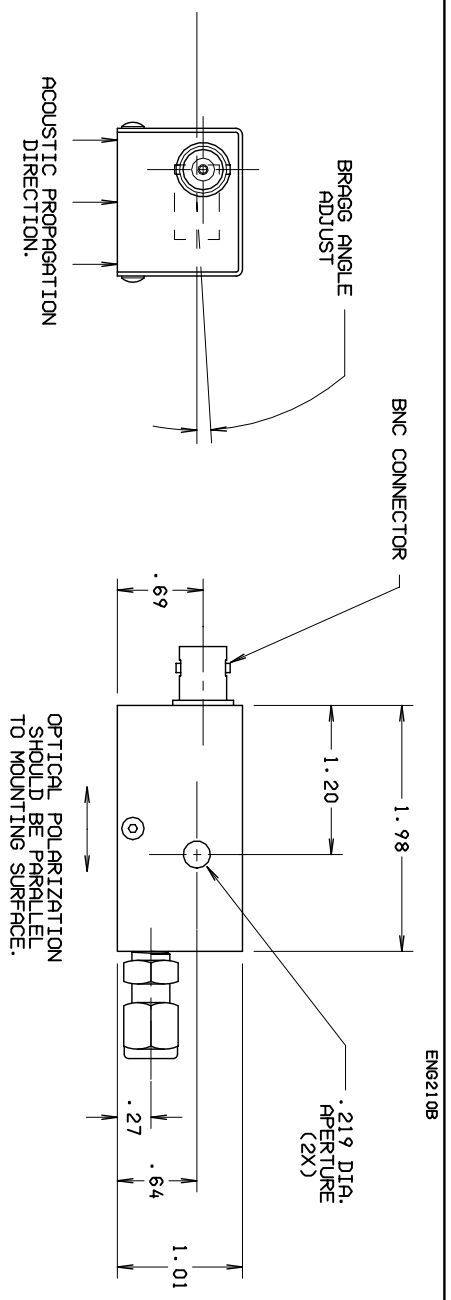
³ Antireflection coatings have a reflectance < 0.1 percent for a 200 nm range. Specify range.

⁴ RF frequency should be 1/2 of the C/2L frequency of the laser cavity.

⁵ Diffraction efficiency and RF drive power vary with optical wavelength and sound field height.

⁶ Other sound field heights to 5mm are available.

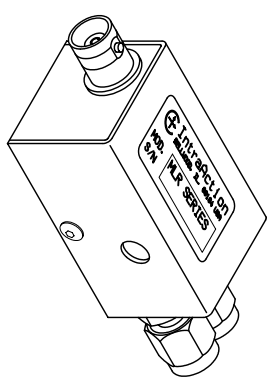
⁷ Thermoelectric cooling is available.




ENG210B

REVISIONS		
ISSUE	DESCRIPTION	APPD./DATE
ORIGINAL	GJK 10-26-93	JL

ALL REVISIONS TO THIS DRAWING MUST BE MADE ON THE CAD SYSTEM



UNLESS OTHERWISE SPECIFIED TOLERANCES AND DIMENSIONS ARE IN INCHES		APPROVED DATE	 Interaction Corp. 3719 WARREN AVE. BELLWOOD, IL 60104 PHONE (708) 547-6644
LINEAR : .XX ± .010 ANGULAR ± / DIAMETERS ± / LIMITS APPLY BEFORE FINISHING DO NOT SCALE THIS PRINT		CHECKED DATE	
MATERIAL		DRAWN DATE	TITLE MODE LOCKER (MLR SERIES) OUTLINE
MFG. INSTR.		GJK 10-26-93	
D. C. INSTR.		FINISH	FSCM NO. B MLR SERIES DWG. NO.
		SCALE FULL	UNIT WEIGHT SHEET 1 OF 1