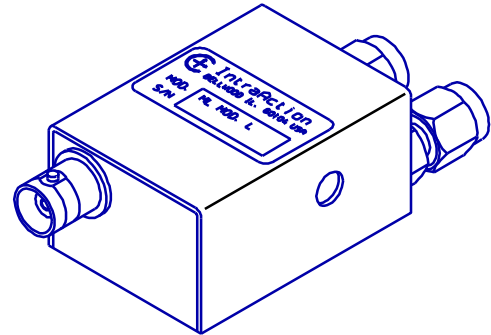


**MODEL MLR SERIES
MODE LOCKER FOR Ti:Sapphire LASER**

- 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.