

M1451(M)-aQ200L-0.5 Acousto-Optic Modulator (Preliminary)



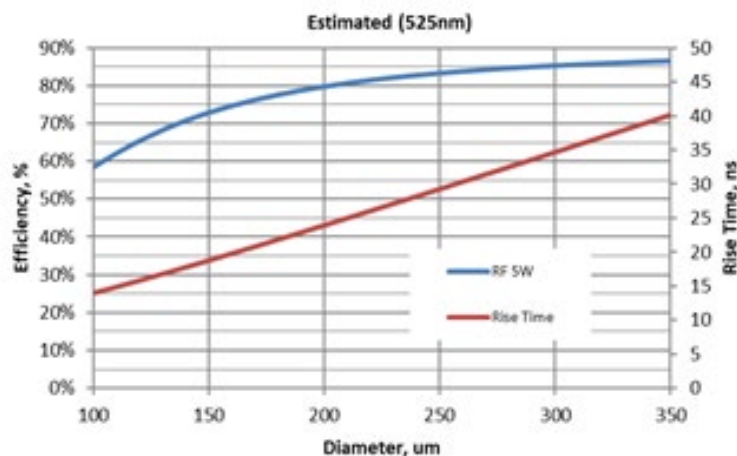
2026

SPECIFICATIONS

A/R Operating Wavelengths*:	360-430nm, 450-550nm
Material:	Quartz
Optical path length:	18mm
Acoustic velocity:	5.7mm/usec
Center Frequency:	200 MHz
RF Bandwidth	+/- 20 MHz
Diffraction Efficiency (<u>peak</u>):	> 85%
Input Impedance:	50Ω
Input VSWR:	< 1.5:1 @ 200MHz
Active Aperture:	0.5mm
Optical Insertion Loss:	< 3%
Reflectivity:	< 0.5%/Surface
DC Contrast Ratio:	>1000:1 min (2000:1 typical)
Laser Polarization:	Vertical, Perpendicular to Base

PERFORMANCE vs. WAVELENGTH

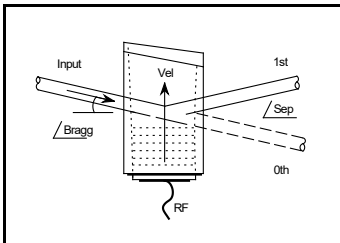
Wavelength (nm):	369	422	525
Peak RF Drive Power (W):	2.7	3.6	6
Max' CW or Average RF power (W):		5	
Typ' CW Diffraction Efficiency	85%	85%	80%
Bragg Angle (mrad):	6.5	7.4	9.2
Separation Angle (mrad):	13	14.8	18.4



(* other wavelengths on request)

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, USA.
Tel: (703) 321 8301 Fax: (703) 321 8546
E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.
In-house: Crystal Growth,
Optical Polishing,
A/R coating, Vacuum Bonding

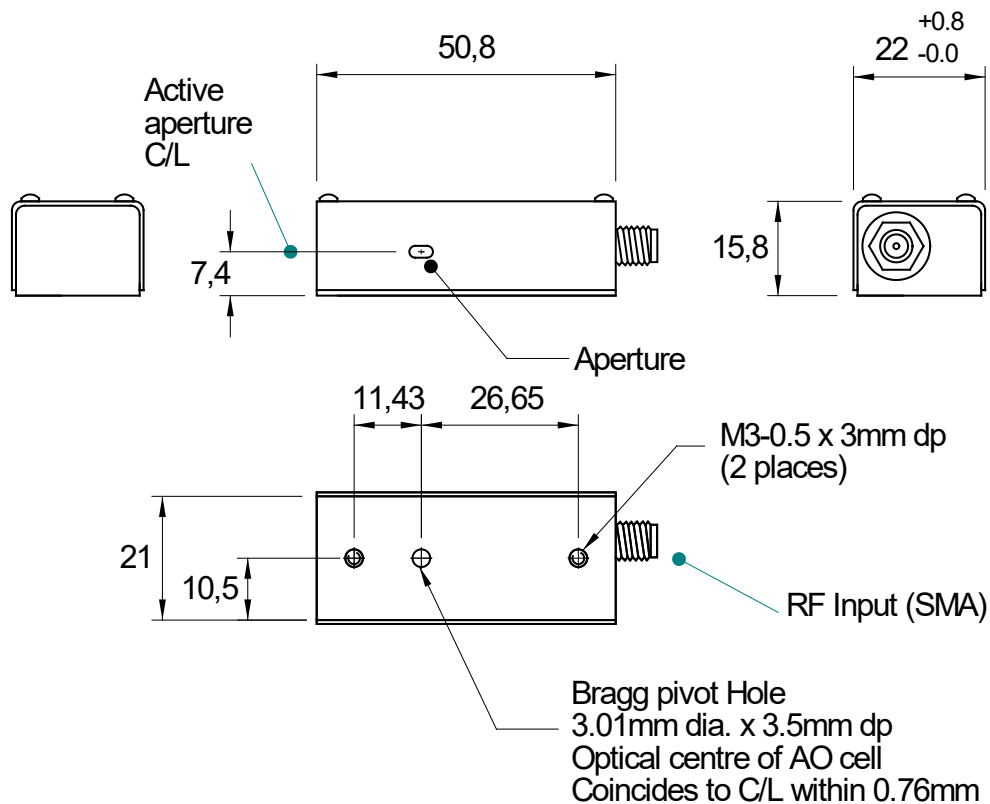


M1451(M)-aQ200L-0.5 Acousto-Optic Modulator (Preliminary)



2026

OUTLINE DRAWING



Suffix (M): M3 metric fixing threads.

Mount device to heat conducting surface

Suggested RF Drive Electronics:

Digital/Analog/Dual modulation
Tuneable with modulation

525F-4 / 535F-4/ 555F-4
iMS4-P with AF0-200T-4

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, USA.
Tel: (703) 321 8301 Fax: (703) 321 8546
E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.
In-house: Crystal Growth,
Optical Polishing,
A/R coating, Vacuum Bonding