

1212

Acousto-Optic Modulator

for use with UV LASERS



1106

SPECIFICATIONS

| | |
|-------------------------|---------------------------------|
| Operating Wavelength: | 325-363 nm (singly or combined) |
| Material: | Quartz |
| Acoustic velocity: | 5.7mm/usec |
| Center Frequency: | 175 MHz |
| RF Bandwidth: | 60 MHz |
| Diffraction Efficiency: | > 85% |
| Input Impedance: | 50Ω(Nominal) |
| Input VSWR: | < 1.5:1 @ 175MHz |
| Active Aperture: | 1.0mm |
| Optical Insertion Loss: | < 3% |
| Reflectivity: | < 0.5%/Surface |
| DC Contrast Ratio: | >1000:1 min (2000:1 typical) |
| Laser Polarization: | Vertical, Perpendicular to Base |
| Outline Dimensions: | (See Reverse Side) |

PERFORMANCE vs. WAVELENGTH

| | | | |
|--------------------------|------|------|------|
| Wavelength (nm): | 325 | 355 | 363 |
| RF Drive Power (Watts): | 2.4 | 2.8 | 3.2 |
| Bragg Angle (mrad): | 5.0 | 5.5 | 5.6 |
| Separation Angle (mrad): | 10.0 | 10.9 | 11.1 |

PERFORMANCE vs. BEAM DIAMETER at 355nm

| | | | | |
|---------------------------------|-----|-----|-----|------|
| Beam Diameter (mm): | 1.0 | 0.2 | 0.1 | 0.06 |
| Risetime (nsec): | 112 | 24 | 13 | 10 |
| Video Bandwidth (MHz): | 3 | 15 | 27 | 35 |
| Diffraction efficiency (typ %): | 87 | 84 | 74 | 58 |

RF Drive Electronics:

| | |
|--------------------|---------------|
| Digital modulation | 525C-175 |
| Analog modulation | 535C-175 |
| Tuneable Frequency | 620C/630C-150 |

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

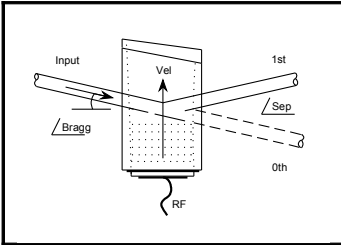
ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

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**



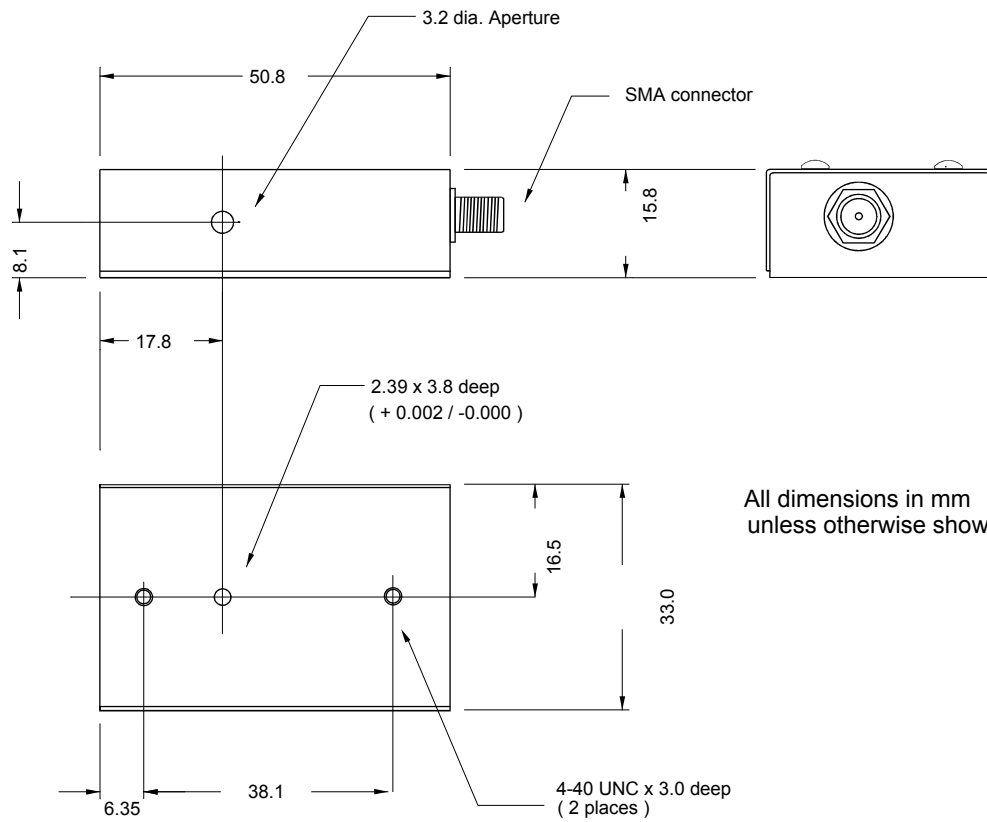
1212

Acousto-Optic Modulator
for use with UV LASERS



1106

OUTLINE DRAWING



ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, 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**