

OPT-1

Acousto-Optic Bragg Cell



1106

A long time aperture Acousto-optic Bragg Cell for Optical Signal Processing Applications

OPERATING PARAMETERS

*Operating Wavelength:	633nm
$\tau\Delta f$:	1500
Centre Frequency:	45MHz
3dB Bandwidth:	30MHz
Active Aperture:	4mmH x 31mmL
Time Aperture:	50 μ s
Interaction Medium:	TeO ₂ - Shear (110)
Acoustic Velocity:	0.617mm/ μ s
Diffraction Efficiency:	> 50% at 0.5 Watts RF Power
Input Impedance:	50 Ω
Input VSWR:	\leq 2:1 across RF Bandwidth
Electrode Profile:	Apodized to minimise acoustic walkoff
Optical Surface Flatness:	$\lambda/10$ or better
Optical Reflectivity:	\leq 0.5%/Surface
RF Power (Maximum):	1.2 Watts

*Models are available for use at any wavelength within the range 442nm-850nm, but certain operating parameters differ, depending on the wavelength selected.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

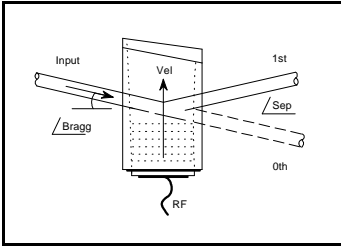
ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

Tel: (703) 321 8301 Fax: (703) 321 8546

E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.

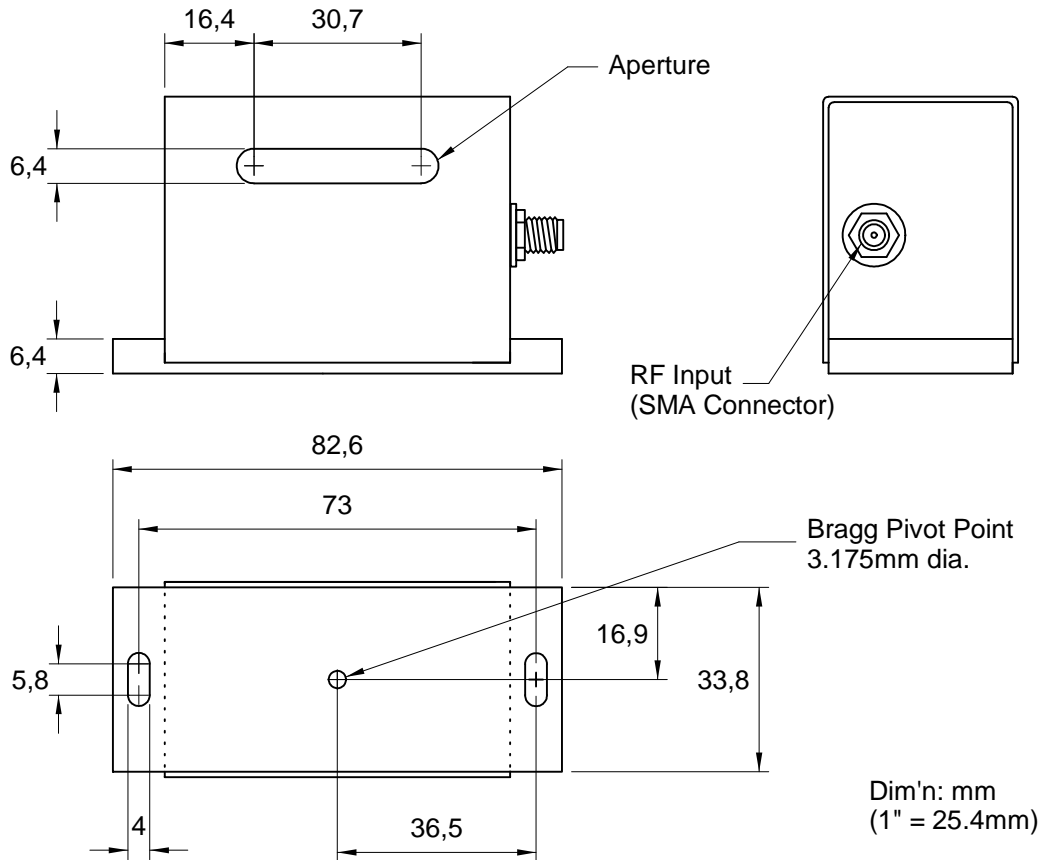
In-house: Crystal Growth,
Optical Polishing,
A/R coating, Vacuum Bonding



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OUTLINE DRAWING



RECOMMENDED DRIVER

521C-45 (Digital Modulation)
531C-45 (Analog modulation)

620C-40 (Variable frequency & Digital Modulation)
630C-40 (Variable frequency & Analog Modulation)

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