

M9080C

Multichannel AO Modulator (Collinear)



902

The Model M9080C was designed to produce eight independent collinear modulated output beams from a row of eight equally spaced input beams. These inputs can be generated from a single laser output by means of an external beam splitter NOT supplied with the M9080C. The collinearity is achieved with a common angle on the input face of the crystals, and by inputting the optimum frequency for each wavelength.

Each spatially separated input beam must be in precise alignment with the respective acoustic column. The input beam spacing must be equal to the electrode spacing of the modulator. Equalized intensity of all output beams is accomplished by manually adjusting each channel's respective RF driver signal input.

Channel to channel acoustic crosstalk (from acoustic dispersion effects) is essentially nonexistent, and the channel to channel electrical crosstalk (from RF leakage) has also been minimized.

SPECIFICATIONS

Interaction Material:	PbMoO ₄ (Longitudinal Mode)
Operating Wavelength:	
Model M9080C-1	476nm to 488nm
Model M9080C-2	510nm to 540nm
Model M9080C-3	610nm to 640nm
Laser Polarization:	Linear/Vertical to Base preferred
Input Beam Size:	200um Diameter
Number of Channels:	Eight
Output Beam Spacing:	1mm (Center to Center)
Diffraction Efficiency:	80% /Channel (Nominal)
RF Drive Power:	<0.5 Watts/Channel
Center Frequency (Fc):	90 MHz (Nominal)
Input Impedance:	50 Ohms (Nominal)
Risetime:	36 nsec (200um Beam Diameter)
VSWR:	<2:1
Modulation Bandwidth:	9MHz

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

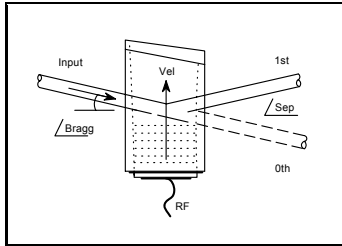
ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

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**



M9080C

Multichannel AO Modulator (Collinear)



902

OUTLINE DRAWING

Under review

All dimensions are in inches
mm equivalents are in parenthesis

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