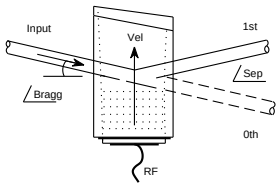


IMDD-P80L-1.5

Integrated AO Modulator & Driver

ISOMET

0916

The IMDD series provides the system designer with an acousto-optic modulator and associated drive electronics in a single compact package. The IMDD-P80L modulation input is configured for On/Off control of laser beam intensity. A single 4 way connector provides connection to the modulation and DC inputs.

The RF drive power is adjusted by means of an 11 turn PWR ADJ potentiometer. The setting depends on the operating wavelength and desired peak efficiency.

SPECIFICATIONS

Standard Operating Wavelength:	450-550nm, 488-633nm, 550-650nm *
Interaction Material:	Lead Molybdate ($PbMoO_4$)
Active Aperture:	1.5mm
Centre Frequency (fc):	80MHz
RF Bandwidth (Δf):	30MHz
Frequency Accuracy:	± 25ppm
Frequency Stability:	± 25ppm
Digital Input:	TTL compatible > 2.7V = RF ON, < 0.8V = RF OFF (10mA input current)
Static Contrast Ratio:	>1500:1 min (>2500:1 typical)
DC Power Input:	+12Vdc or +15Vdc at <0.3A (diode protected)
Connection:	20cm, pre-wired connector to free-end cable provided

PERFORMANCE vs. BEAM DIAMETER

Beam Diameter (mm):	1.0	0.34	0.20	0.14
Rise Time (ns):	180	60	35	25
Modulation Bandwidth (MHz):	1.9	5.8	10	15
Deflection Efficiency (%):	≥85	≥85	≥80	≥75

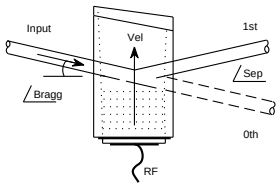
PERFORMANCE vs. WAVELENGTH

Wavelength (nm):	473	488	532	633
Static Insertion Loss:	<7.0	<5.0	<3.0	<3.0
Bragg Angle (mrad):	5.2	5.4	5.9	7.0
Separation Angle (mrad):	10.4	10.8	11.7	14.0

* Other Anti-Reflection coatings available upon request.
** Options available

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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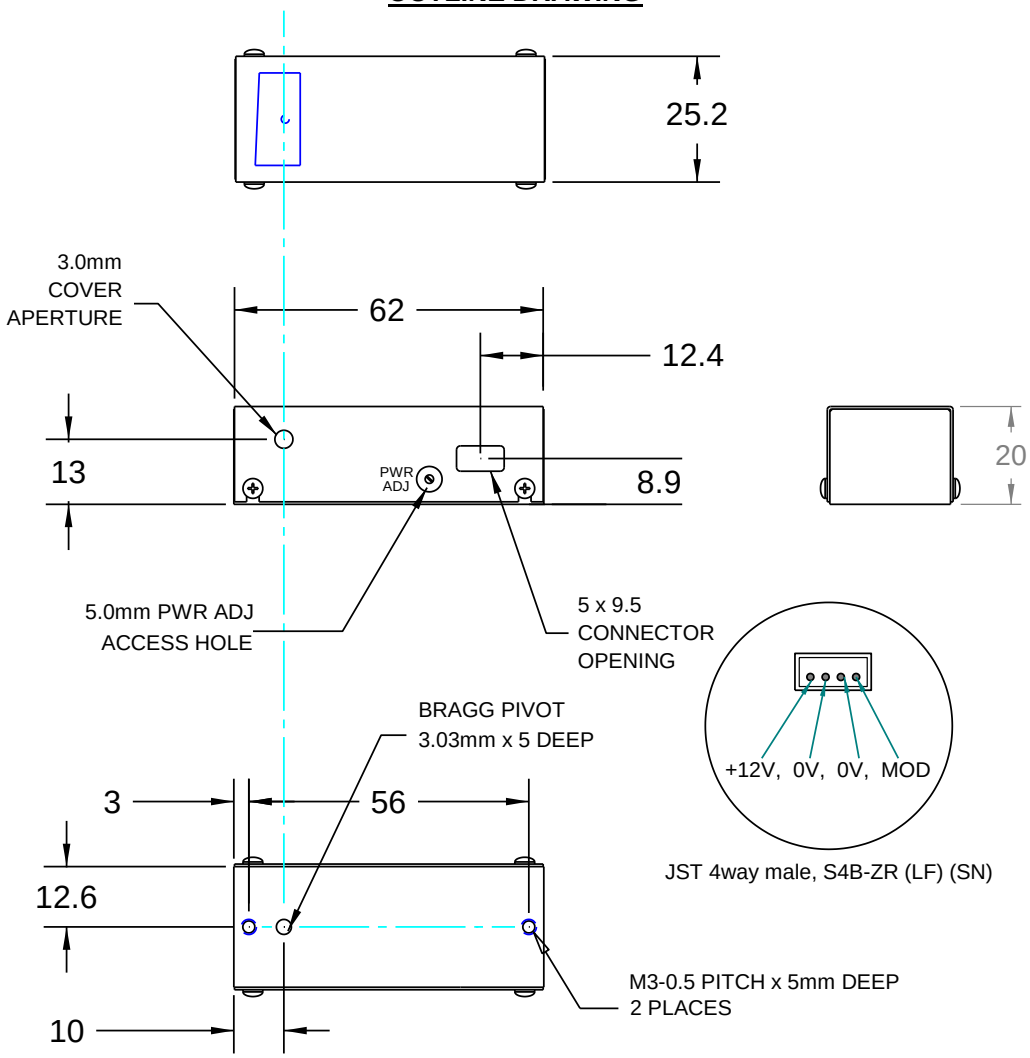
OUTLINE DRAWING



Connector:

JST ZH Series 4 way, 1.5mm Pitch
Mating Housing : ZHR-4
Crimp Contacts : BZH-003-PO.5

Mount device on a heat conducting surface

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