

IMAA-P80L-1.5

Integrated AO Modulator & Amplifier



0812

The IMAA series provides the system designer with an acousto-optic modulator and RF power amplifier in a single compact package. The IMAA-P80L is designed for applications where a low level RF frequency source is provided externally. These devices are ideal for frequency shifting and amplitude control

The RF gain 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:	A/R dependent 488-633nm or 633-830nm *
Interaction Material:	Lead Molybdate (PbMoO ₄)
Active Aperture:	1.25mm
Centre Frequency (fc):	80MHz
RF Bandwidth (Δf):	30MHz
Gain	+30dB minimum
RF Input:	+3dBm (2mW) maximum
Connector: SMC Coaxial	Mating: SMC
RF Input Impedance:	50 Ω (nominal)
DC Power Input:	+12Vdc or +15 Vdc at < 0.3A, diode protected
Connector: Molex 43020, 3mm pitch	Mating Housing : 43025 Crimp Contacts : 43030
Recommended wire : 28awg, 2 x twisted pairs	

PERFORMANCE vs. BEAM DIAMETER at 532nm

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

* Other Anti-Reflection coatings available upon request.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

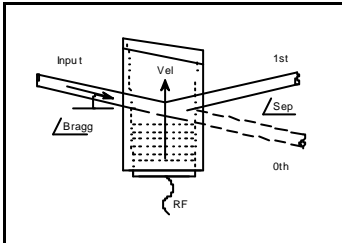
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Quality Assured.

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



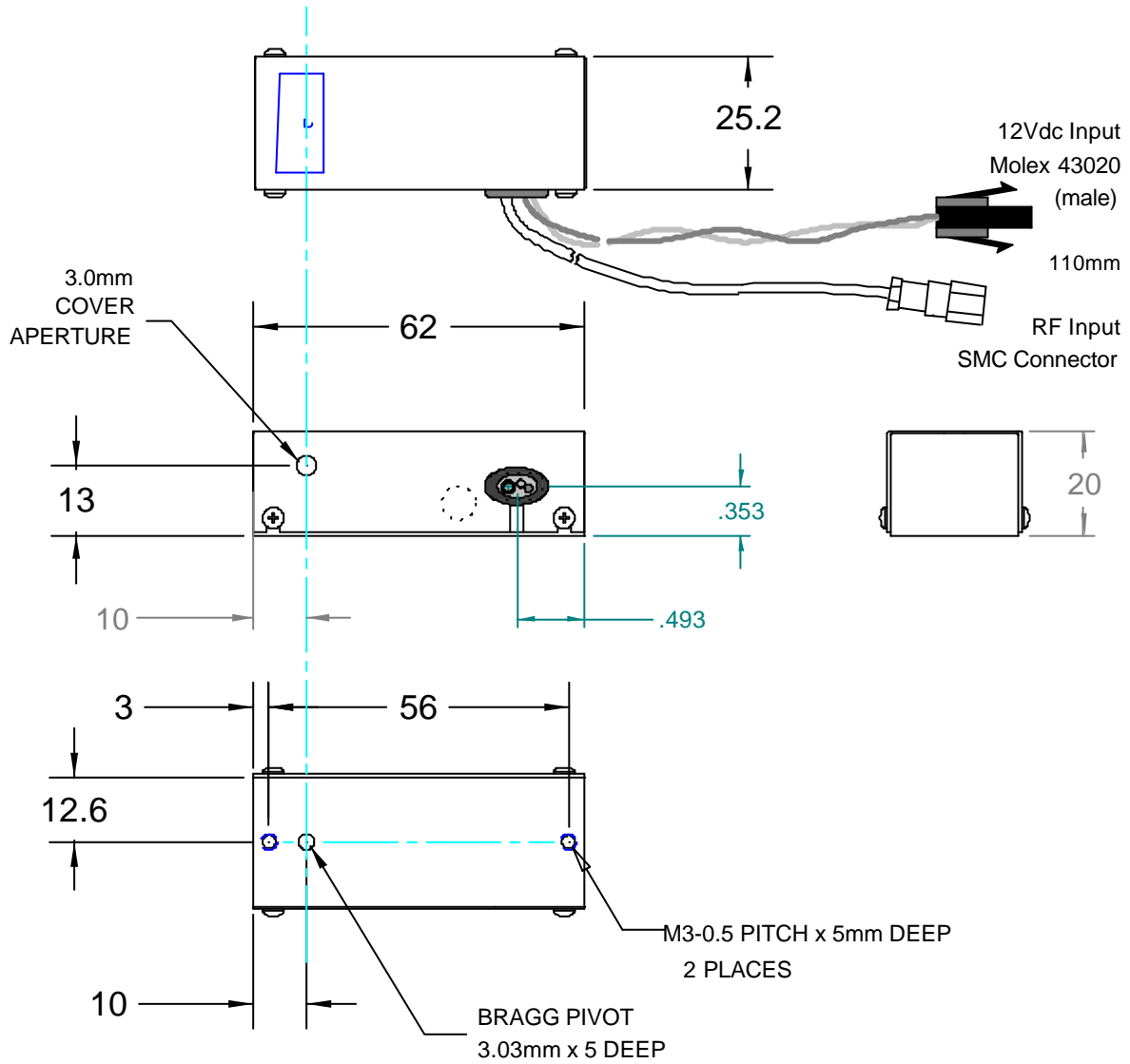
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OUTLINE DRAWING



Mount device on a heat conducting surface

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