

M1312-T80L-6-(TC)



Acousto-Optic Modulator

1217

Large aperture AO Modulator designed for High Power NIR Fibre and DPSS laser applications

SPECIFICATIONS

Spectral Range:	0.36 > 1.5 μ m
Standard A/R Wavelengths:	1.03 -1.1 μ m
Interaction Medium:	Tellurium Dioxide (TeO ₂)
Acoustic Velocity:	4.2mm/ μ s
Centre Frequency (Fc):	80MHz
RF Bandwidth:	30MHz
Input Impedance:	50 Ω Nominal
VSWR:	<1.5:1 @ Fc
Clear Aperture:	8mm
Active Aperture Height:	6mm
Static Insertion Loss	<3% at 1.1 μ m
Reflectivity:	< 0.5%/Surface
Laser Polarization:	Any
DC Contrast Ratio:	>1000:1 min (>2000:1 typical)
Cooling:	Water cooled. Corrosion inhibitor strongly recommended Thermal interlock switch opens at 40degC

TYPICAL PERFORMANCE at 1.1 μ m

Optical Power:	500 Watts CW **
Beam Diameter (mm):	5
Optical Rise Time (ns):	760
Modulation Bandwidth (MHz) @ MTF = 0.5:	0.45
Deflection Efficiency (% @ CF) * :	90 Polarization Perpendicular to Base 85 Polarization Horizontal to Base
RF Power:	6 Watts nominal
Bragg Angle (1.07 μ m):	10.2 mrad
Separation Angle at fc :	20.4 mrad

* Single mode input

** For > 5mm diameter beam. For higher powers densities please contact Isomet

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

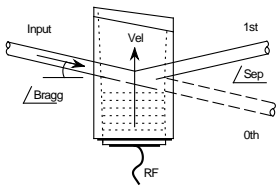
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Quality Assured.

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



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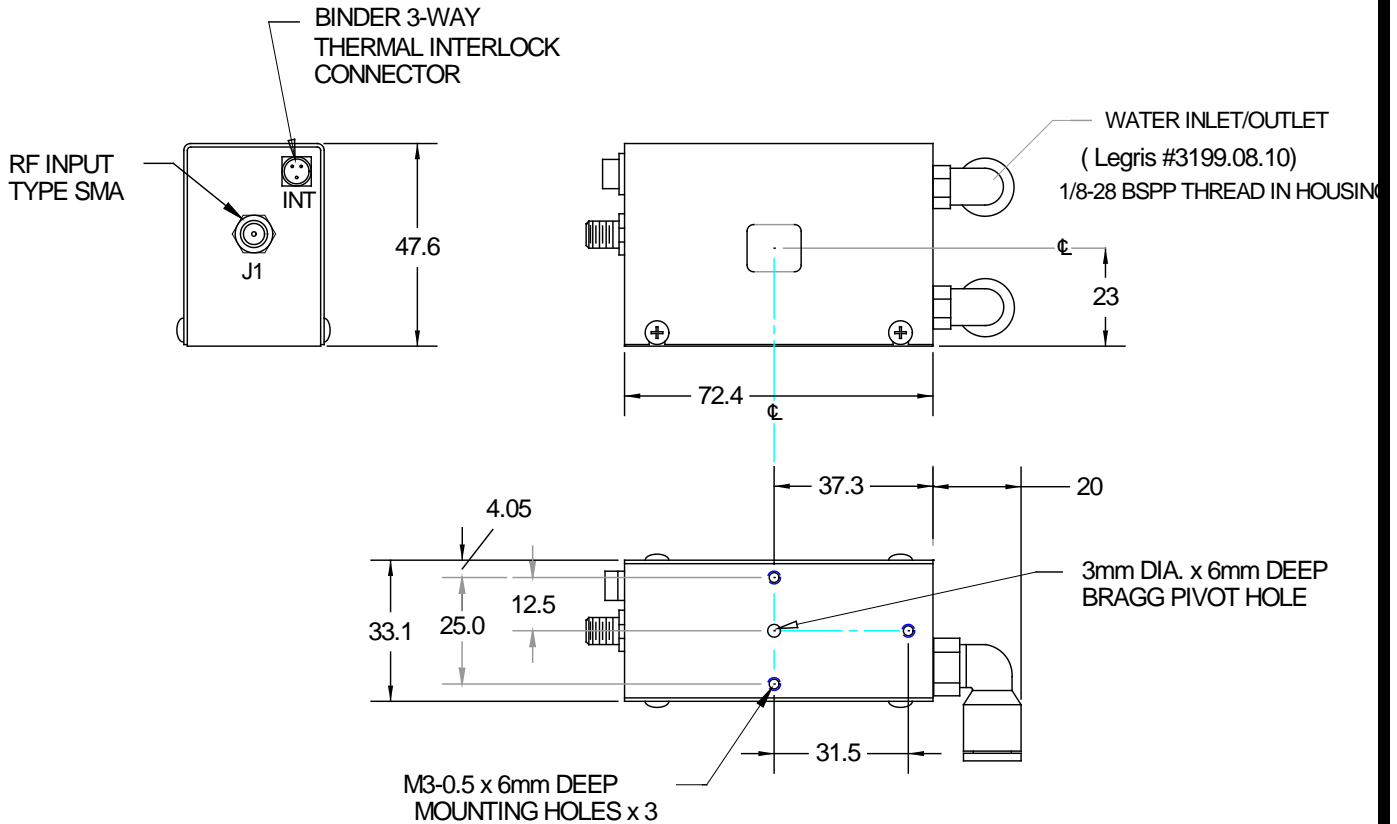


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OUTLINE DRAWING

Dimensions: mm
Case material: Aluminium (standard) or Tellurium Copper (option -TC)



Recommended Driver(s)

Model 522C-7 (Digital Modulation)

Model 532C-7 (Analog Modulation)

Water cooled option: add -W to above driver model number

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