

M1419-G40L-7, -8

High Power AO Modulator



3922

APPLICATIONS

- Material Processing
- Via Hole Drilling
- Surface texturing
- Perforation

FEATURES

- Low loss
- High Optical Power
- Improved cooling

The M1419 series have been designed to minimize thermal lensing and reduce beam degradation at high optical powers. Water cooling in contact with copper only.

SPECIFICATIONS (TYPICAL)

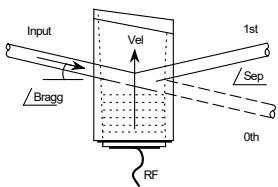
Operating Wavelength:	9.3, 9.4, 9.6 or 10.6um (specify)*		
Interaction Material:	Germanium		
Active Aperture:			
M1419-G40L-7	7mmH x 30mmW		
M1419-G40L-8	8mmH x 30mmW		
Centre Frequency:	40MHz		
RF Bandwidth:	>10MHz		
RF Power for max' efficiency	-7mm	-8mm	
9.3/9.4um	< 100W	< 115W	
9.6um	< 110W	< 125W	
10.6um	< 130W	< 150W	
Static Insertion Loss:	< 4%		
Maximum Optical Power:	600 Watts, 7mm dia. Gaussian beam		
Bragg Angle:	<u>9.3um</u>	<u>9.6um</u>	<u>10.6um</u>
33.9mrad	33.9mrad	34.9 mrad	38.6 mrad
Separation Angle:	67.7mrad	69.8 mrad	77.1 mrad
Laser Polarization:	Linear, Horizontal		
Water Cooling (Minimum):	> 2L/Min. @ < 20°C		
<u>Modulator performance:</u>			
Optical Rise Time	0.12usec / mm beam diameter		
Diffraction Efficiency	85% minimum, 90% typical		
Modulator Drive Electronics:	RFA641 (40MHz)		

Options:

- A : All aluminium
- P : Air purge inlets
- * : other wavelengths available over 2.5µm - 11.2µm range.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
 ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, USA.
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Quality Assured.
In-house: Crystal Growth,
Optical Polishing,
A/R coating, Vacuum Bonding



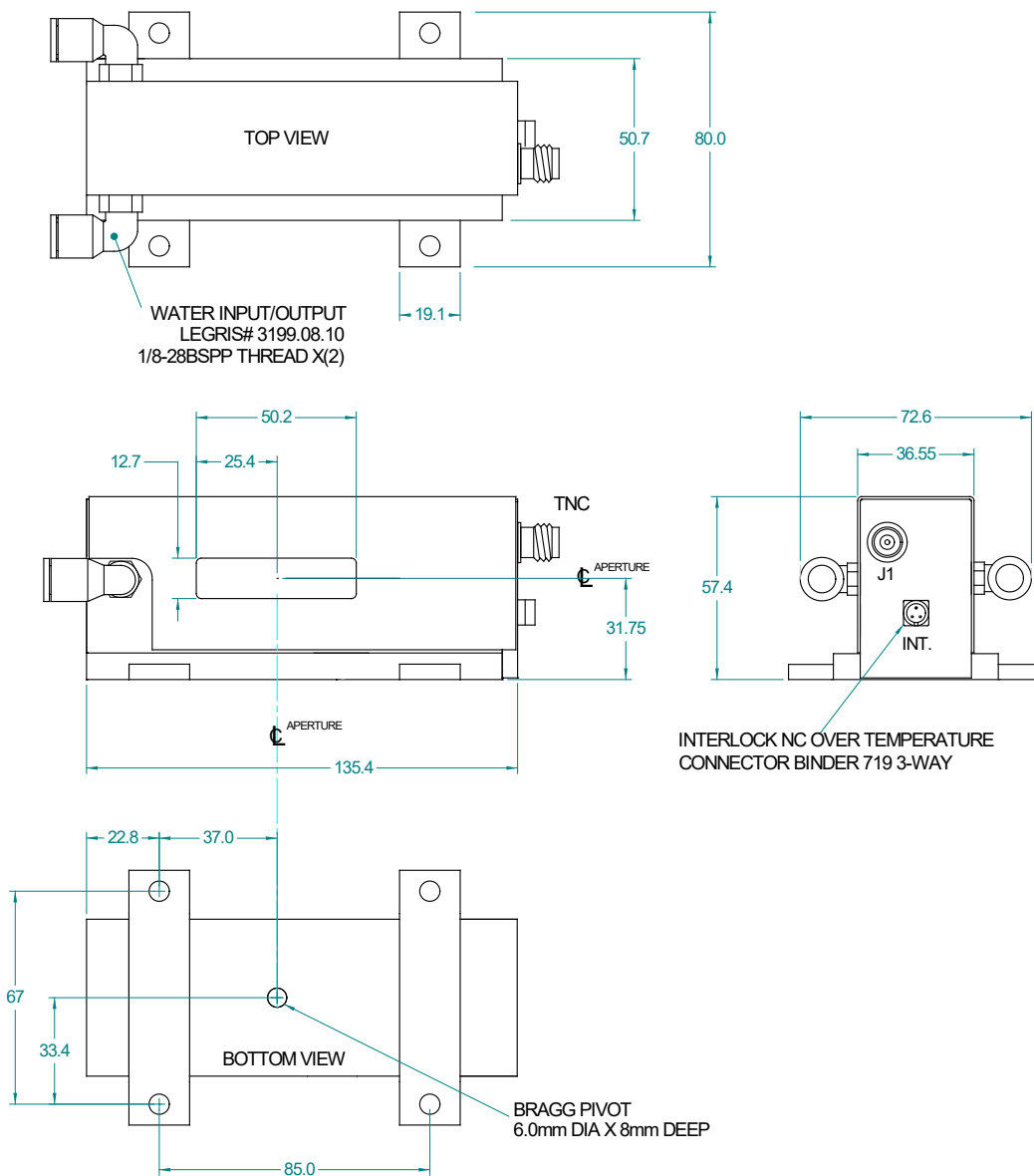
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OUTLINE DRAWING



Dimensions: mm

Water coolant in contact with copper only
Refer application note AN1906 regarding Coolant Specification

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