

LS600-1109-10(-W)



Large Aperture GE Modulator (PRELIMINARY SPEC)

1007

The LS600-1109 series are large aperture Germanium AO devices designed for signal processing applications in the mid-IR to far-IR.

The LS600-1109-10 is designed for low average driver powers. Cooling is by conduction only. The average RF power must not exceed 5W or 2% duty at full rated RF input

The LS600-1109-10-W is designed for high average or CW driver powers. This unit is water cooled.

A water cooled version is available for higher duty cycle / CW applications

SPECIFICATIONS (TYPICAL)

A/R Coating Wavelengths:	4.7 – 6.7 μ m 3 – 10 μ m
Interaction Material:	Germanium
Centre Frequency (fc):	75MHz
FM Bandwidth:	50MHz
Diffraction Efficiency:	80% (Bragg adjusted)
Maximum RF Power	<240 Watts peak, 5W average
Static Insertion Loss:	<7% (coating dependent)
Optical Power (max):	600Watts (CW full aperture)
Bragg Angle at 6 μ m:	40.9 mrad.
Separation Angle at 6 μ m:	81.8 mrad. (@ fc)
Active Aperture:	10mmH x 55mmW
Access Time:	10 μ sec
Laser Polarization:	Linear, Horizontal
Cooling:	
< 2% duty cycled operation	Conduction cooled
> 2% to CW	Water cooling version is required (-W)
Drive Electronics**:	RFA-1160/4-1ZP

** The RFA1160/4-1ZP requires a frequency source such as the iDDS-2 programmable frequency synthesizer or customer supplied waveform generator.

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



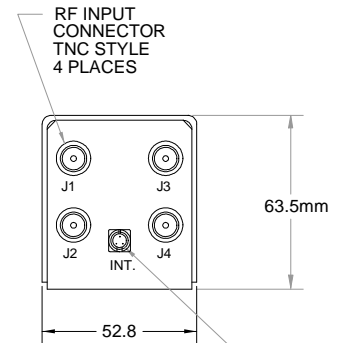
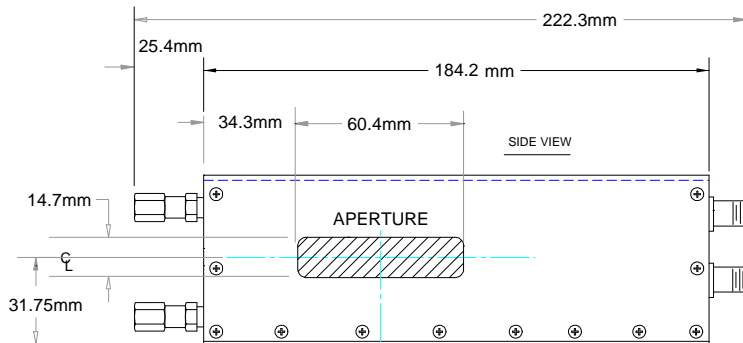
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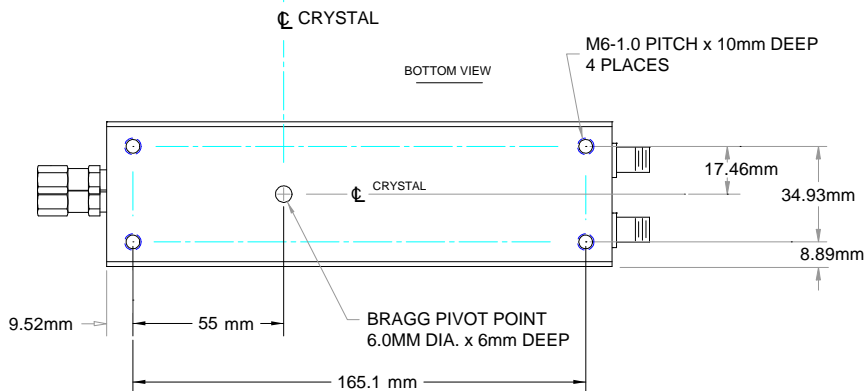
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OUTLINE DRAWING: LS600-1109-10W (Water Cooled)



Over temperature Interlock Connector
3-pin Snap
Normally Closed Contacts : Pins 1 , 2
Not connected : Pin 3



NOTES:

1. THIS DEVICE REQUIRES WATER COOLING TO PREVENT THERMAL RUNAWAY. THE INTEGRAL NC THERMAL INTERLOCK SWITCH OPENS AT 35 DEGREES CENTIGRADE.
2. THE WATER COOLED CASE PARTS ARE ALUMINIUM, CORROSION INHIBITOR SHOULD BE ADDED TO THE COOLANT WATER

Dimensions: mm
(Water cooled model)

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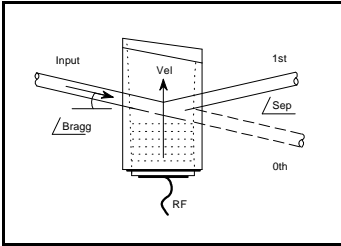
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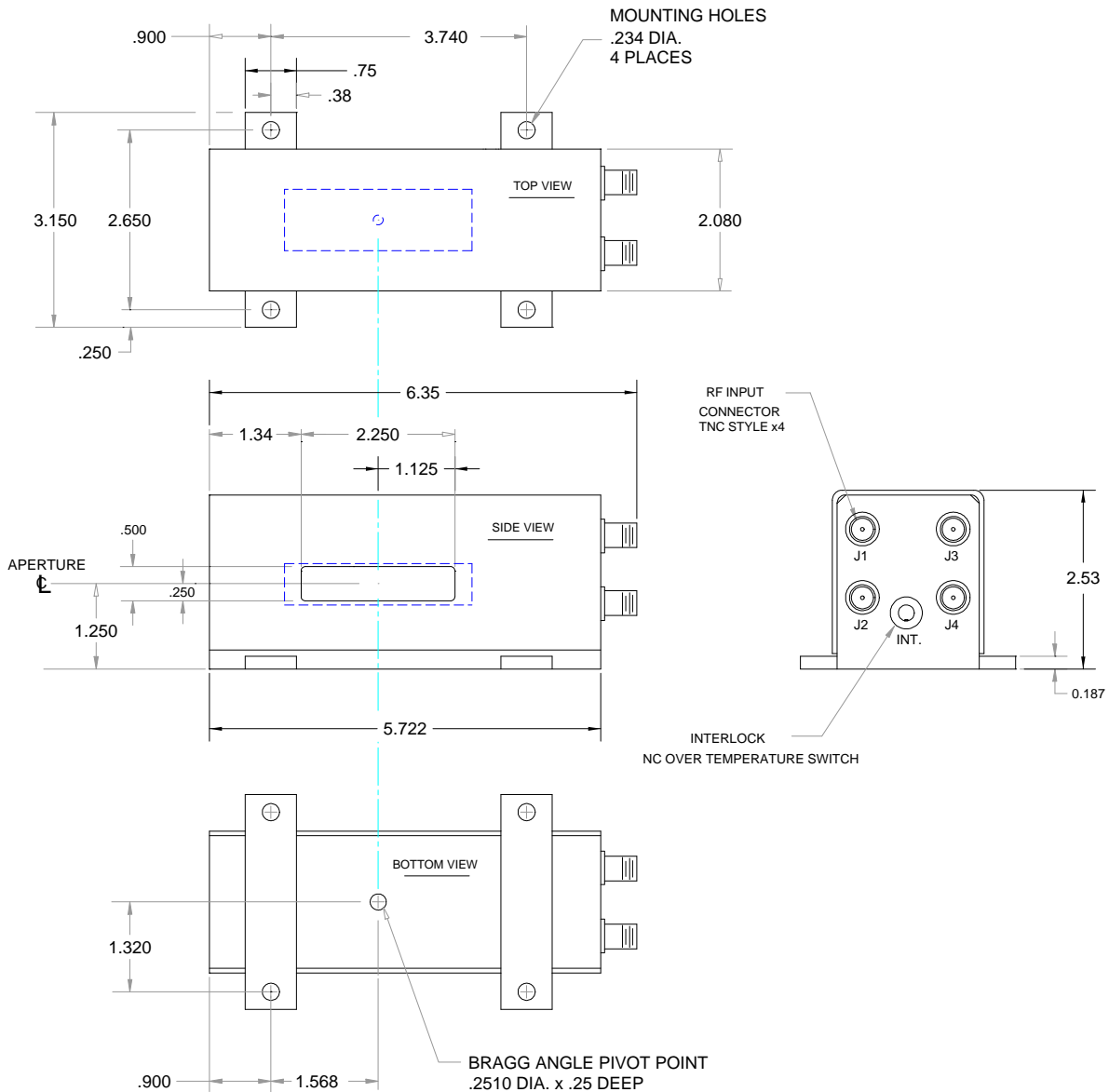
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OUTLINE DRAWING: LS600-1109-10 (Conduction Cooled)



Dimensions: Inches
(Conduction cooled model)

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