

M1340-FS150-3



UV Acousto-Optic Modulator

0820

The M1340-FS150 is high efficiency AO modulator developed specifically for industrial 355nm laser applications including:

Material Processing

Drilling

Surface texturing

Micro machining

SPECIFICATIONS

Operating Wavelength: 355nm
Centre Frequency (fc): 150MHz
RF Bandwidth: 20MHz

Diffraction Efficiency at fc: 85% minimum, >90% typ

 $\begin{array}{ll} \mbox{Input Impedance:} & 50\Omega(\mbox{Nominal}) \\ \mbox{Input VSWR:} & <1.5:1 \ \mbox{@ } 150\mbox{MHz} \\ \end{array}$

Active Aperture,H: M1340-FS150-3, 3mm M1340-FS150-5, 5mm

Optical Insertion Loss: <3% (<2% typical)
Reflectivity: <0.5%/Surface

DC Contrast Ratio: >2000:1 min (3000:1 typical)
Laser Polarization: Vertical, Perpendicular to scan

Water Cooling (Min): 2L/minute @ 25deg C

PERFORMANCE vs. WAVELENGTH

Wavelength: 355nm
RF Drive Power (H=3mm) < 10.0W
Bragg Angle: 4.47mrad

Separation Angle (at fc): 8.93mrad

PERFORMANCE vs. BEAM DIAMETER

Beam Diameter (mm):3.01.0Optical Rise time (nsec):320107Modulation Bandwidth (MHz):1.03.2

RF Drive Electronics

RFA2150-1 (water cooled)

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

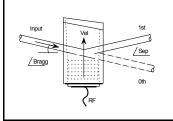
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Quality Assured. In-house: Crystal Growth, Optical Polishing,

A/R coating, Vacuum Bonding



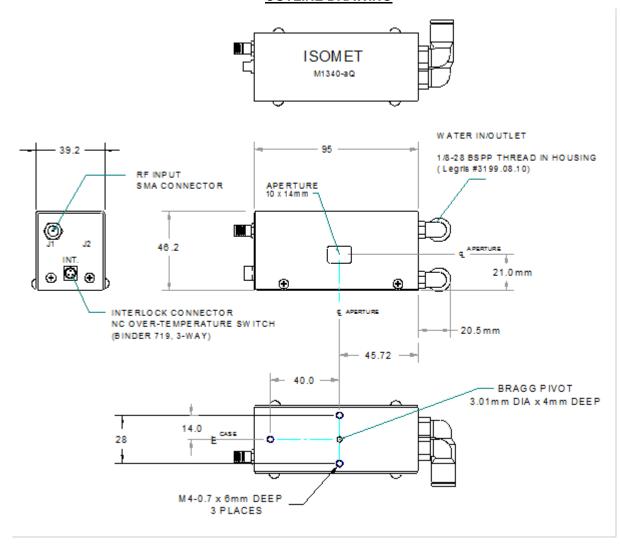
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OUTLINE DRAWING



Water cooled case parts are made from Aluminium. Copper alternative is available as an option

Refer application note AN1906 regarding Coolant Specification

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