

M1135-T80L-4 (TC)



Acousto-Optic Modulator

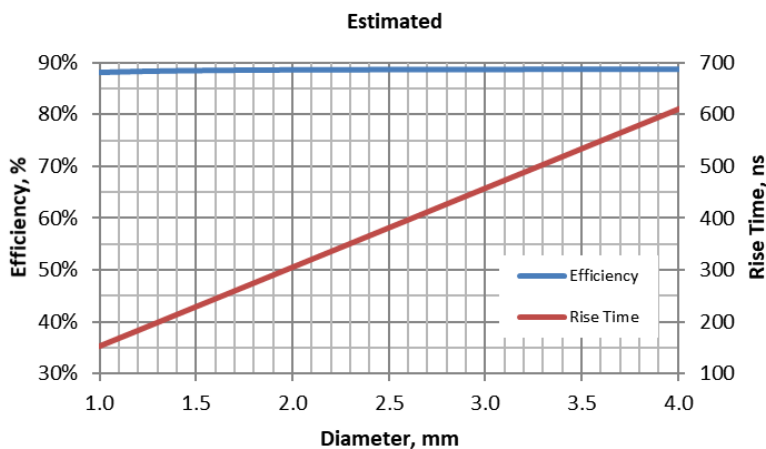
0420

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

SPECIFICATIONS

Spectral Range:	0.36 - 1.5 μm
Standard A/R Wavelengths:	1.03 - 1.1 μm
Optical Power:	200 Watts CW *
Interaction Medium:	Tellurium Dioxide (TeO_2)
Acoustic Velocity:	4.2mm/ μs
Centre Frequency (F_c):	80MHz
RF Bandwidth:	30MHz
Input Impedance:	50 Ω Nominal
VSWR:	<1.5:1 @ F_c
Clear Aperture:	6mm
Active Aperture Height:	4mm
Static Insertion Loss	<3% at 1.1 μm
Reflectivity:	< 0.5%/Surface
Laser Polarization:	Any / vertical preferred *
DC Contrast Ratio:	>1000:1 min (>2000:1 typical)

TYPICAL PERFORMANCE at 1.064 μm *



RF Power (nominal)	5 Watts
Bragg Angle (1.07 μm):	10.1 mrad
Separation Angle at f_c :	20.3 mrad

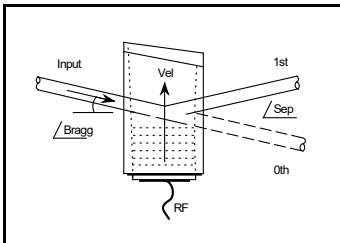
* See foot notes

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
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Quality Assured.
In-house: Crystal Growth,
Optical Polishing,
A/R coating, Vacuum Bonding



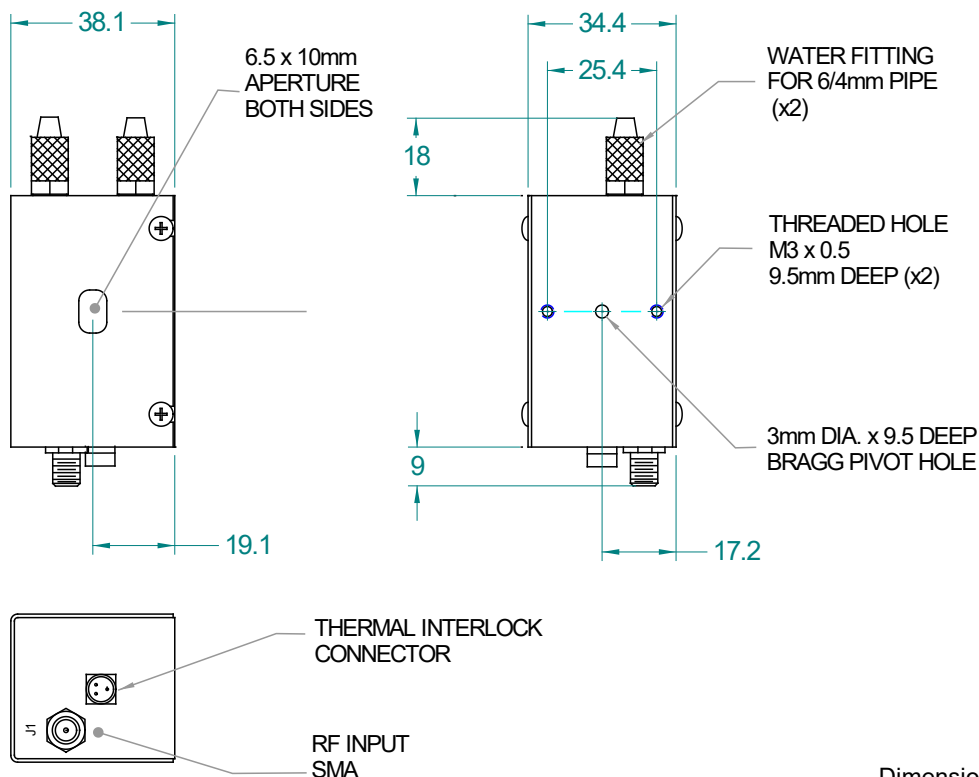
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OUTLINE DRAWING



Dimensions: mm

Suffix -M: M3 metric fixing threads standard.

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

Always apply water cooling, < 25decC at >1 litre / minute

Corrosion inhibitor strongly recommended. Thermal interlock switch opens at 40degC

RF DRIVE ELECTRONICS

Digital modulation: 522F-7

Analog modulation: 532F-7

Dual modulation: 552F-7

* Notes:

- For higher powers please contact Isomet.
- Approximately 5% efficiency difference between v-pol and h-pol for the same RF drive power.
- Estimated efficiency applies to single mode input.

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