

SPECIFICATIONS

AO Medium	TeO ₂	
Acoustic Velocity	.66 mm/μs	
Active Aperture*	3 mm 'L' X	1.5 mm 'H'
Center Frequency (Fc)	65 MHz	
RF Bandwidth	40 & 90.9 MHz @	-7.5 dB Return Loss
Input Impedance	50 Ohms Nominal	
VSWR @ 40 & 90.9MHz	2.5 :1 Max	
Wavelength	1550 & 635 nm	
Insertion Loss	10 % Max	
Reflectivity per Surface	5 % Max	
Anti-Reflection Coating	MIL-C-48497	
Optical Power Density	2 W/mm ²	
Contrast Ratio	1000 :1 Min	
Polarization	Perpendicular ° To Mounting Plane	

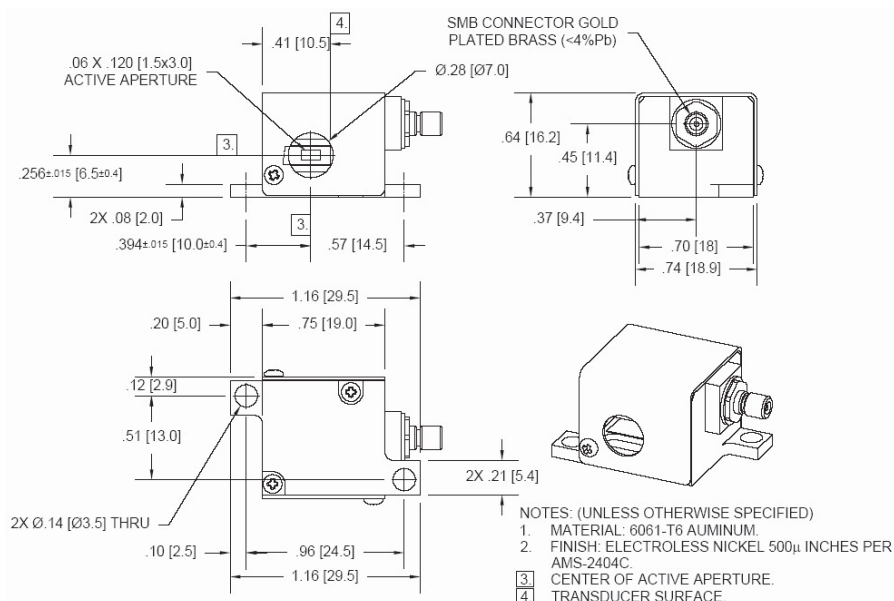
PERFORMANCE VS WAVELENGTH

Wavelength (nm)	635	1550
Operational RF Power (W)	.1	.7
Bragg Angle (mr)	157	157
Beam Separation (mr)	86.5	91.6

PERFORMANCE VS BEAM DIAMETER

Beam Diameter (μm)	1000	1000
<i>at Wavelength (nm)</i>	635	1550
Diffraction Efficiency (%)	65	70
Rise Time (nsec)	950	950
Frequency(MHz)	90.9	40

Outline Drawing:



Document

02/11/22

Control

Notes:

Diffacted beam collinearity for 635nm(90.9MHz) and 1550nm(40MHz) <3mrad.
 Maximum RF 2W
 1st order to zero order Beam Separation 91.6mrad@1.55um, 86.5mrad@635nm.
 Storage temperature -20 to +60C, 90% RH non condensing
 Operational temperature -10 to +50C, 90% RH non condensing

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TOLERANCES: .XX ± .01 .XXX ± .005	DR	T. NG 2/4/2022	Gooch & Housego		
MATERIAL:	CHK		DESCRIPTION: AODF 4065 635-1550NM 1.5X5MM		
FINISH:	APP		PART NUMBER:	REV:	SHEET
	APP		97-03438-02	2	1 OF 1

*Active Aperture: Aperture over which performance specifications apply.