

Preliminary Specifications

SPECIFICATIONS

AO Medium	TeO ₂	
Acoustic Velocity	4.2 mm/μs	
Active Aperture*	2 mm 'L' X	1 mm 'H'
Center Frequency (Fc)	80 MHz	
RF Bandwidth	20 MHz @	-10 dB Return Loss
Input Impedance	50 Ohms Nominal	
VSWR @ Fc	1.3:1 Max	
Wavelength	750-1064 nm	
Insertion Loss	5 % Max	
Reflectivity per Surface	<1.5 % Max	
Anti-Reflection Coating	MIL-C-48497	
Optical Power Density	<250 W/mm ²	
Contrast Ratio	1000:1 Min	
Polarization	Perpendicular	To Mounting Plane

PERFORMANCE VS WAVELENGTH

Wavelength (nm)	750	900	1064
Operational RF Power (W)	.7	1.0	1.3
Bragg Angle (mr)	7.1	8.6	10.13
Beam Separation (mr)	14.2	17.2	20.26

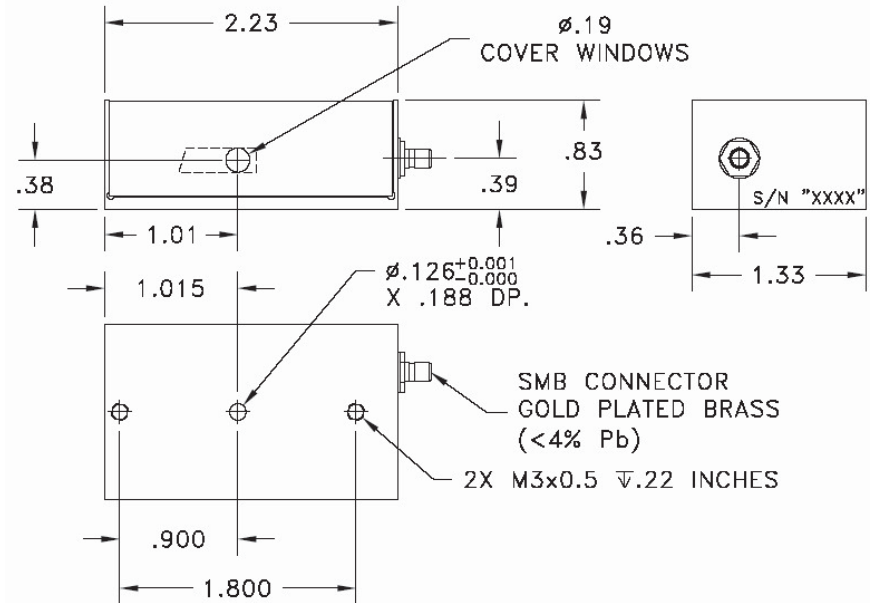
PERFORMANCE VS BEAM DIAMETER

Beam Diameter (μm)	600	600	600
at Wavelength (nm)	750	900	1064
Diffraction Efficiency (%)	>85	>85	>85
Rise Time (nsec)	96	96	96

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Document
09/22/22
Control

Outline Drawing:



NOTES:

1. MATERIAL: 6061-T6 ALUMINUM.
2. FINISH: ELECTROLESS NICKEL 500u INCHES PER AMS-2404C.

Notes:

MTBF 3500 hours with a 500W laser and a 1.5mm 1/e²
Maximum RF 3W
AR coating V_{coat} centered 850nm
Machined materials to be solvent cleaned, acetone and IPA 15 minutes each.
Storage temperature -20 to +60C, 90% RH non condensing.

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TOLERANCES: .XX ± .01 .XXX ± .005	DR	T. NG 9/6/2022	Gooch & Housego		
MATERIAL:	CHK		DESCRIPTION: AOMO 3080 .75-1.06um,		
FINISH:	APP		PART NUMBER:	REV:	SHEET 1 OF 1
	APP		97-03466-01	B	

*Active Aperture: Aperture over which performance specifications apply.