

**SPECIFICATIONS**

AO Medium		TeO2
Acoustic Velocity		4.2 mm/μs
Active Aperture*	2.5 mm 'L' X	1.5 mm 'H'
Center Frequency (Fc)		100 MHz
RF Bandwidth	25 MHz @	-10 dB Return Loss
Input Impedance		50 Ohms Nominal
VSWR @ Fc		1.3 :1 Max
Wavelength		470-690 nm
Insertion Loss		4 % Max
Reflectivity per Surface		1 % Max
Anti-Reflection Coating		MIL-C-48497
Optical Power Density		250 W/mm <sup>2</sup>
Contrast Ratio		1000 :1 Min
Polarization		90° To Mounting Plane

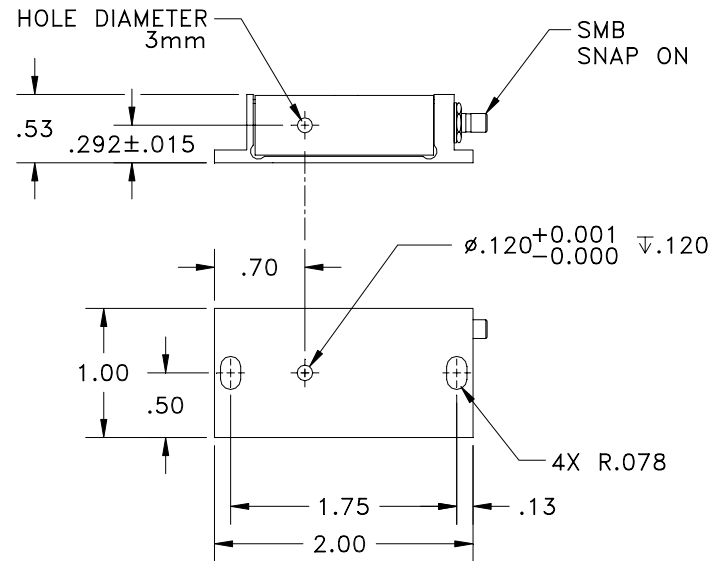
**PERFORMANCE VS WAVELENGTH**

<b>Wavelength (nm)</b>	<b>470</b>	<b>532</b>	<b>633</b>	<b>690</b>
Saturation RF Power (W)	0.4	0.6	0.9	1.1
Bragg Angle (mr)	5.6	6.3	7.5	8.2
Beam Separation (mr)	11.2	12.6	15	16.4

**PERFORMANCE VS BEAM DIAMETER**

<b>Beam Diameter (μm)</b>	<b>1000</b>	<b>1000</b>	<b>1000</b>	<b>1000</b>
<i>at Wavelength (nm)</i>	470	532	633	690
Diffraction Efficiency (%)	85	85	85	85
Rise Time (nsec)	159	159	159	159

**Outline Drawing:**



**Document**

**04/26/11**

**Control**

Notes:



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TOLERANCES: .XX ± .01 .XXX ± .005	DR	Gerri Scholz 4/19/2011	DESCRIPTION: <b>AOMO 3100-125</b> 100 MHz Frequency Shifter	
MATERIAL:	CHK		PART NUMBER:	97-03035-01
FINISH:	APP		REV:	B
	APP		SHEET 1 OF 1	

\*Active Aperture: Aperture over which performance specifications apply.