



# Gooch & Housego

## DEVICE SPECIFICATIONS

### MODEL NUMBER:

# 45100-5-6.5DEG-.51

### DOCUMENT NUMBER: 56A9853D

<u>PARAMETER</u>	<u>SPECIFICATION</u>
Interactive Material	TeO <sub>2</sub>
Acoustic Mode	Shear Wave
Operating Wavelength	440 to 530 nm
Window Configuration	AR Coated
Static Transmission	> 95 %
Operating Frequency	75 to 125 MHz.
Intensity Variation	2 dB
Diffraction Efficiency	> 70 % Midband with linear polarization parallel to acoustic propagation
Acoustic Aperture Size	5 mm
Process Time	7.5 $\mu$ s
Resolution (T.BW product)	375 spots with no less than 60 $\mu$ s scan time and full illumination of the aperture
$\Delta$ Deflection Angle	39 mrad @ 514 nm
Deflection Angle	78 mrad @ 100 MHz, 514 nm
RF Power Level	2 watt maximum
Impedance	50 ohms
VSWR	< 2:1 across band
Package:	53B2024
Operating Manual:        Use latest Revision.	51A12229
Acceptance Test Procedure:	42A12653
Acceptance Test Results form:	52A11841
Recommended Driver:	
Analog System Digital Frequency Synthesizer: 64020-200-2ADSDFS-A	
Analog Module Digital Frequency Synthesizer: 64020-200-2ADMDFS-A	
8 Channel Digital Frequency Synthesizer Driver Module: 64048-80-.8-ADMDFS-8X1	
Analog System Voltage Controlled Oscillator: 21075-125-2ASVCO	
Analog Module Voltage Controlled Oscillator: 21075-125-2AMVCO	

For More Information, Contact: [Sales@GoochandHousego.com](mailto:Sales@GoochandHousego.com) [www.goochandhousego.com](http://www.goochandhousego.com)

As part of our policy of continuous product improvement we reserve the right to change specifications at any time.



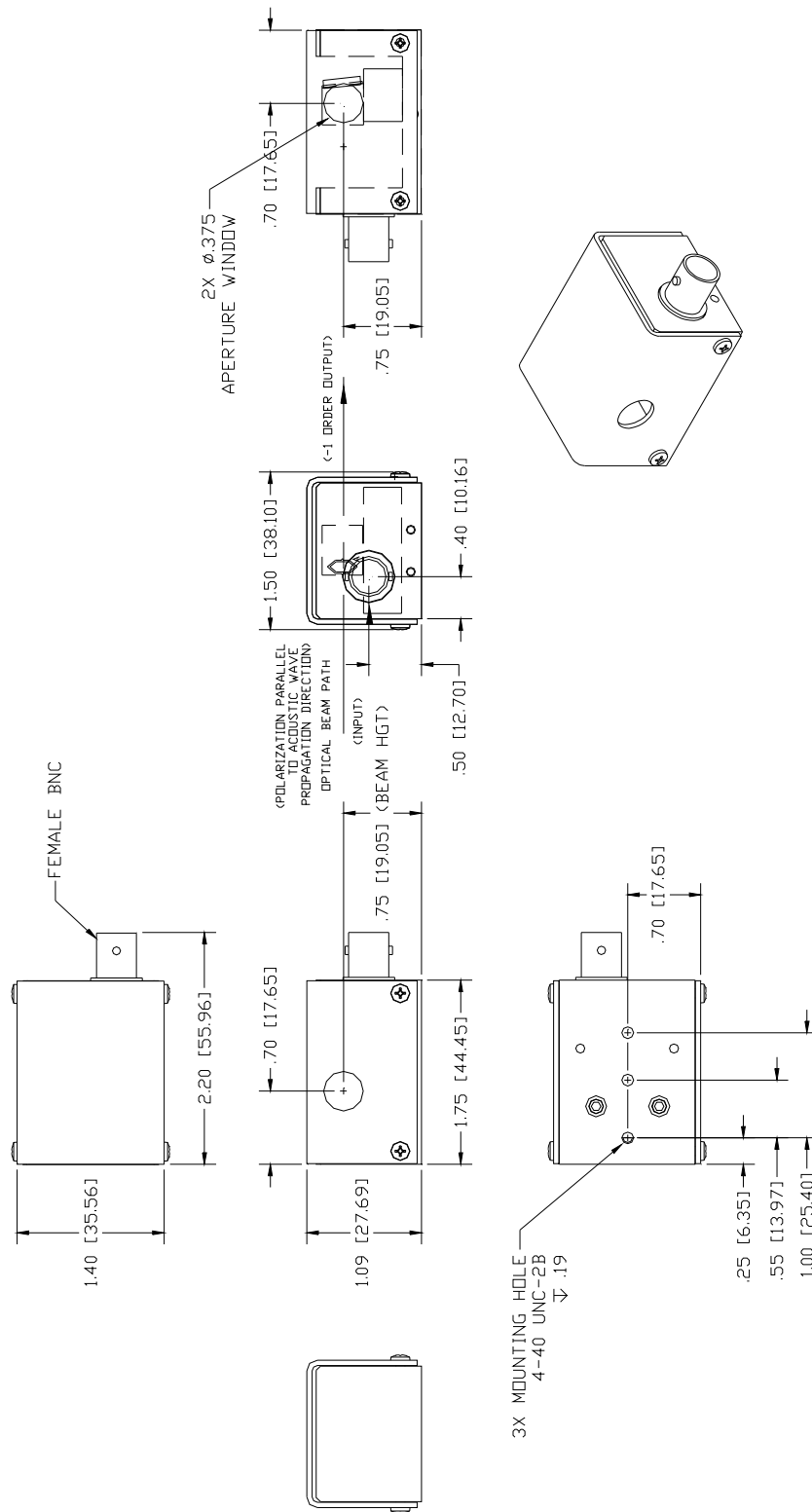
光技術をサポートする  
**株式会社オプトサイエンス**  
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**Mechanical Dimensions:**

**Dimensions in inches and [mm]**

53D2024



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# Gooch & Housego

## SUB-SYSTEM SPECIFICATIONS

### MODEL NUMBER:

**45100-5-6.5DEG-.51-X**

**45100-5-6.5DEG-.51-Y**

**with 72003 mount**

The XY AOBD sub-system combines a 45100-5-6.5DEG-.63-X and a 45100-5-6.5DEG-.63-Y, with the acoustic propagation at right angle to each other, with the 72003 adjustable mount and is used as a 2D optical deflector sub-system.

### DOCUMENT NUMBER: 56A15652D

<u>PARAMETER</u>	<u>SPECIFICATION (for each Device)</u>
Interactive Material	TeO <sub>2</sub>
Acoustic Mode	Shear Wave
Operating Wavelength	440 to 530 nm
Window Configuration	AR Coated
Static Transmission	> 95 %
Operating Frequency	75 to 125 MHz.
Intensity Variation	2 dB
Diffraction Efficiency	>70 % Midband per Device with linear polarization, parallel to acoustic propagation for input device.*
Acoustic Aperture Size	5 mm
Process Time	7.5 $\mu$ s
Resolution (T.BW product)	375 spots with no less than 60 $\mu$ s scan time and full illumination of the aperture
$\Delta$ Deflection Angle	39 mrad @ 514 nm
Deflection Angle	78 mrad @ 100 MHz, 514 nm
RF Power Level	2 watt maximum per Device
Impedance	50 ohms
VSWR	< 2:1 across band
Package:	53D1970
Operating Manual:        Use latest Revision.	51A14089
Acceptance Test Procedure:	42A12653
Acceptance Test Results form:	52A11841

### Recommended Drivers for the XY AOBD sub-system:

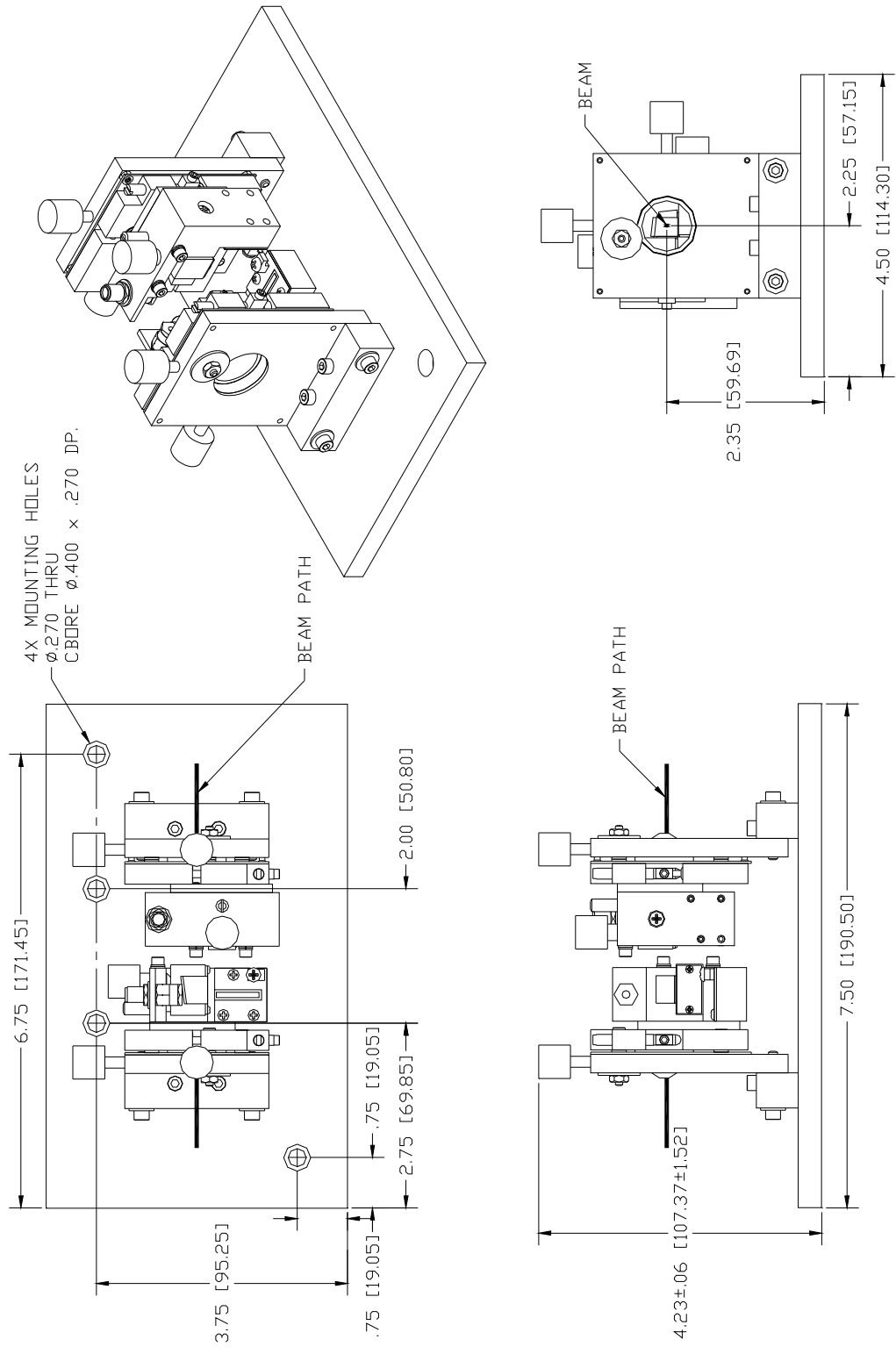
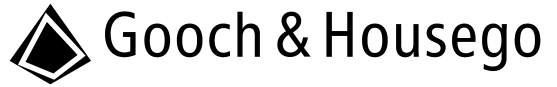
- Analog System Digital Frequency Synthesizer: 64020-200-2ADSDFS-A-2
- Analog Module Digital Frequency Synthesizer: 64020-200-2ADMDFS-A (x2)
- Eight Channel AOD Driver module: 64048-80-.8ADMDFS-8X1(x2)
- Analog System Voltage Controlled Oscillator: 64075-125-2ASVCO-2
- Analog Module Voltage Controlled Oscillator: 21075-125-2AMVCO (x2)

\* Polarization is rotated 90 degrees in the first device, which is the correct polarization for the second device.

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**Mechanical Dimensions:**  
**Dimensions in inches and [mm]**



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## DEVICE SPECIFICATIONS

MODEL NUMBER:

**45100-6**

DOCUMENT NUMBER: **56A18008B**

<u>PARAMETER</u>	<u>SPECIFICATION</u>
Interactive Material	TeO <sub>2</sub>
Acoustic Mode	Shear Wave
Operating Wavelength	440 to 530 nm
Window Configuration	AR Coated
Static Transmission	> 95 %
Operating Frequency	75 to 125 MHz
Intensity Variation	3 dB
Diffraction Efficiency	> 60 % Midband with polarization circular or linear
Acoustic Aperture Size	6 mm
Processing Time	9.7 $\mu$ s
Resolution (T.B.W. product)	485 spots with no less than 70 $\mu$ s scan time and full illumination of the aperture
Deflection Angle	87 mrad @ 530 nm, @ 100 MHz
$\Delta$ Deflection Angle	41 mrad @ 530 nm
RF Power Level	2 watts
Impedance	50 ohms
VSWR	< 2.5:1 Across Bandwidth
Package:	53B2024
Operating Manual:        Use Latest Revision.	51A02042
Acceptance Test Procedure:	42A12653
Acceptance Test Results form:	52A11841
Recommended Drivers:	

Analog System Digital Frequency Synthesizer: 64020-200-2ADSDFS-A  
Analog Module Digital Frequency Synthesizer: 64020-200-2ADMDFS-A

Eight Channel Digital Frequency Synthesizer Driver module: 64048-80-.8ADMDFS-8X1

Analog System Voltage Controlled Oscillator: 64075-125-2ASVCO-1

Analog Module Voltage Controlled Oscillator: 64075-125-2AMVCO

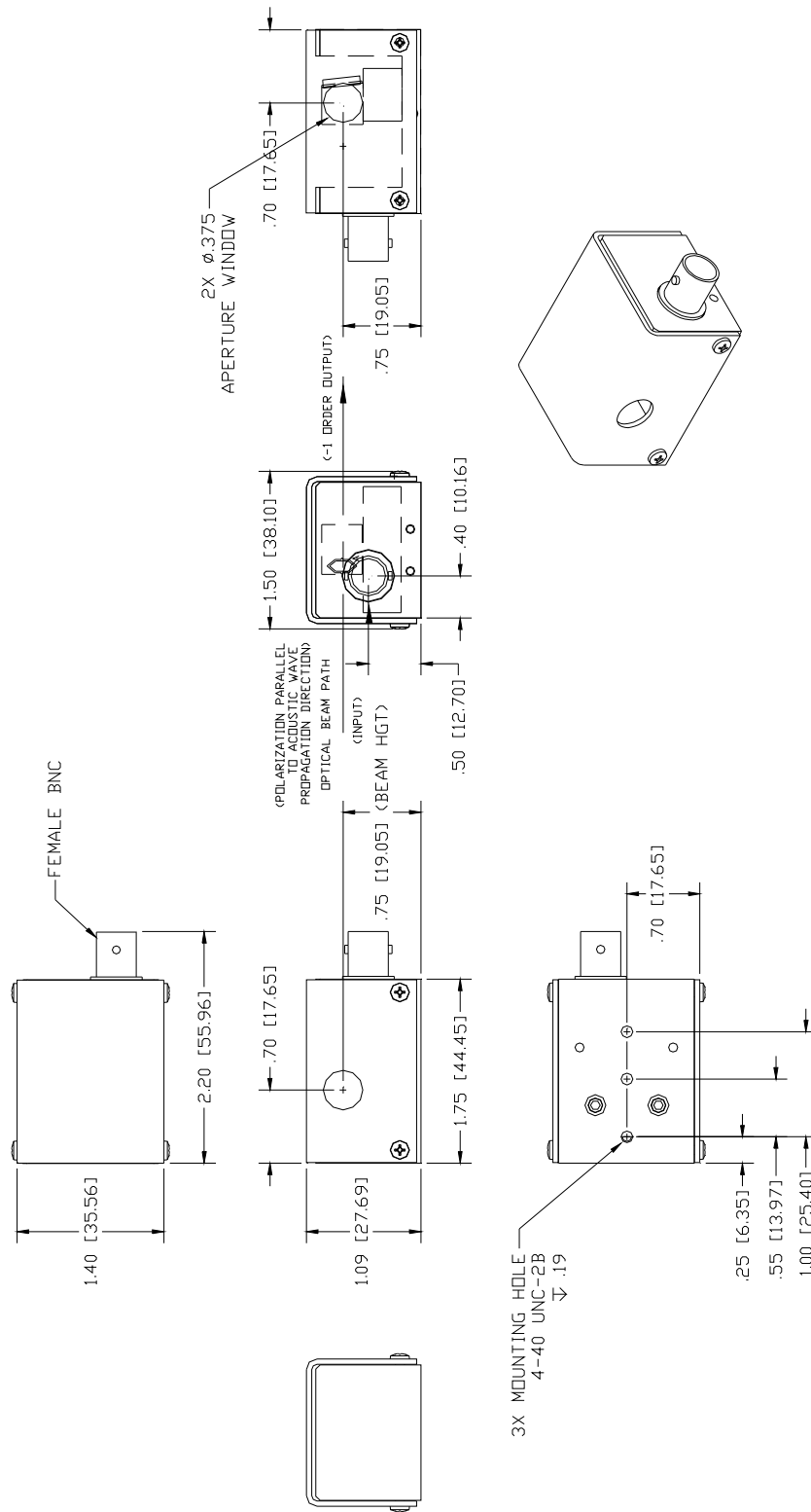
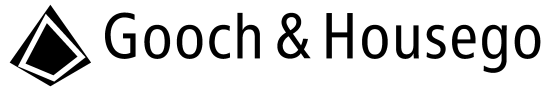
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**Dimensions in inches and [mm]**

53D2024



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