



NEOS TECHNOLOGIES

A Gooch & Housego Company

SUB-SYSTEM SPECIFICATIONS

MODEL NUMBER:

45035-3-6.5DEG-1.06-X

45035-3-6.5DEG-1.06-Y

with 72003 mount

The XY AOBD sub-system combines a 45035-3-6.5DEG-1.06-X and a 45035-3-6.5DEG-1.06-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: 56A15588C

| <u>PARAMETER</u> | <u>SPECIFICATION (for each Device)</u> |
|--|---|
| Interactive Material | TeO ₂ |
| Acoustic Mode | Shear Wave |
| Operating Wavelength | 1064 nm |
| Window Configuration | AR Coated |
| Static Transmission | > 97 % |
| Operating Frequency | 25 to 45 MHz |
| Intensity Variation | < 2 dB across band |
| Diffraction Efficiency | > 60 % mid-band per device with linear polarization parallel to acoustic propagation for input device.* |
| Acoustic Aperture Size | 3 mm |
| Process Time | 4.5 μ s |
| Resolution (T.BW product) | 90 spots with no less than 50 μ s scan time and full illumination of the aperture |
| Δ Deflection Angle | 32 mrad |
| Deflection Angle | 56 mrad @ 35 MHz |
| RF Power Level | < 2 watts for each device |
| Impedance | 50 ohms nominal |
| VSWR | < 2:1 across band |
| Package: 72003 | 53D1970 |
| Operating Manual: Use Latest Revision. | 51A14088 |
| Acceptance Test Procedure: | 42A12572 |
| Acceptance Test Results form: | 52A11839 |

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 (2X)

Analog System Voltage Controlled Oscillator: 64025-45-2ASVCO-2
Analog Module Voltage Controlled Oscillator: 21025-45-2AMVCO (2X)

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