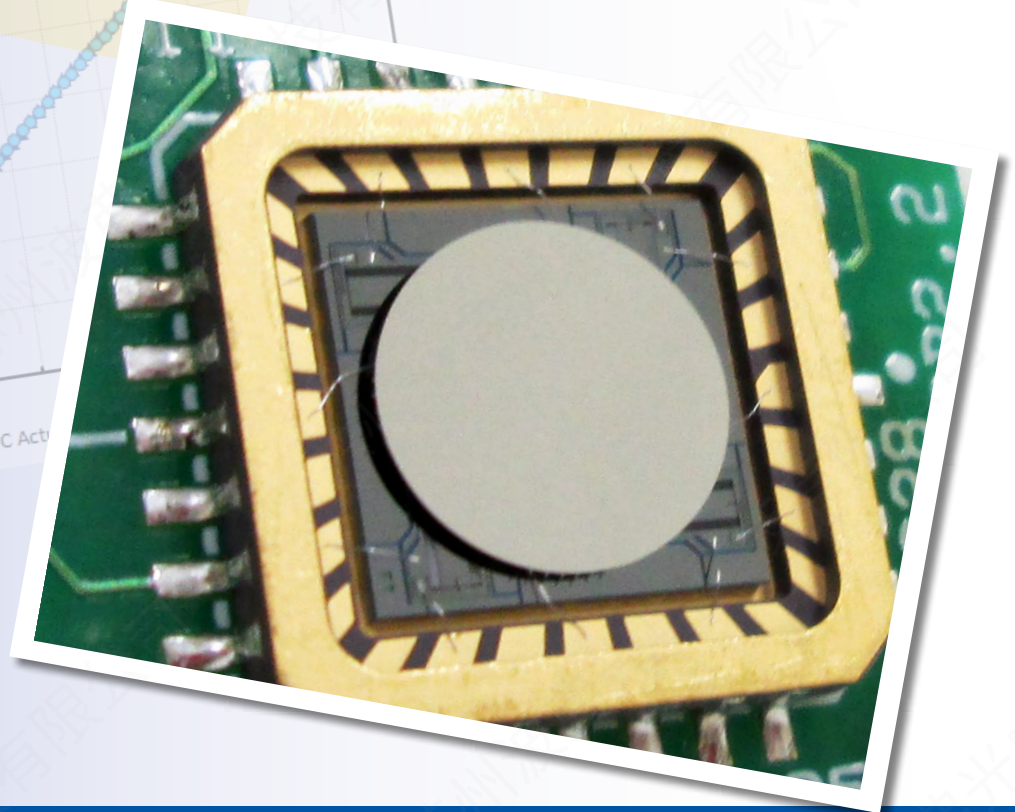
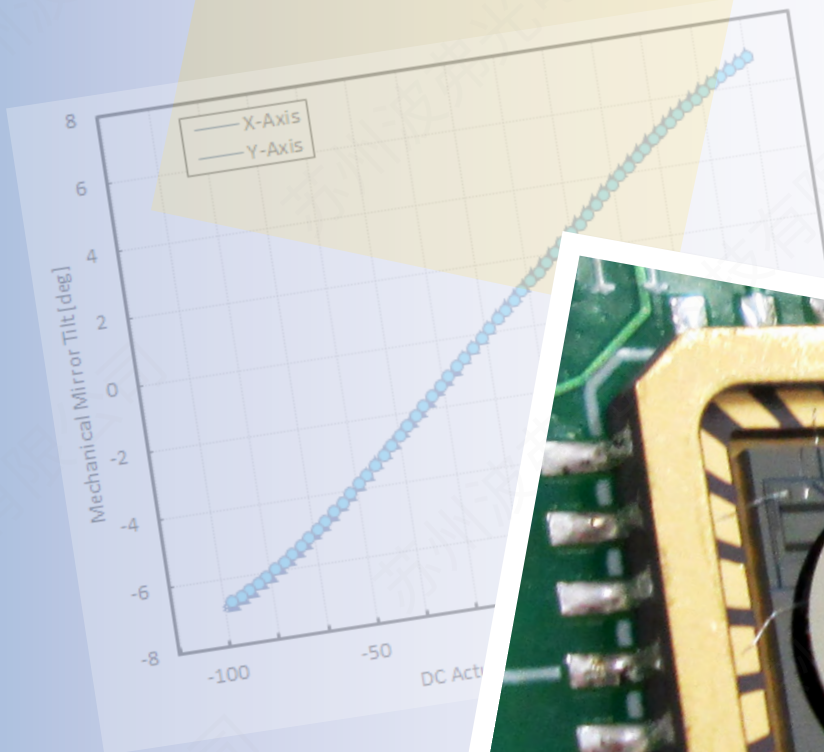


Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S46105



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Device Parameters Summary

Device ID : S46105

Actuator Name: A7M20.2

Actuator Mode : Gimbal-less Dual-Axis Quasistatic

Mirror Type: Integrated

Mirror Size : 2000um diameter

Mirror Coating : Aluminum

Maximum Mech. Angle - X Axis [degrees] : 5.6439

Maximum Mech. Angle - Y Axis [degrees] : 5.6677

Maximum Vdifference - X Axis [V] : 168.6000

Maximum Vdifference - Y Axis [V] : 167.3500

Driver Bias Voltage (Vbias) [V] : 90

Maximum Mech. Angle - Coupled Axes [degrees] : 8.1329

Resonant Frequency - X Axis [Hz] : 1304

Resonant Frequency - Y Axis [Hz] : 1304

Quality Factor - X Axis : 85.4000

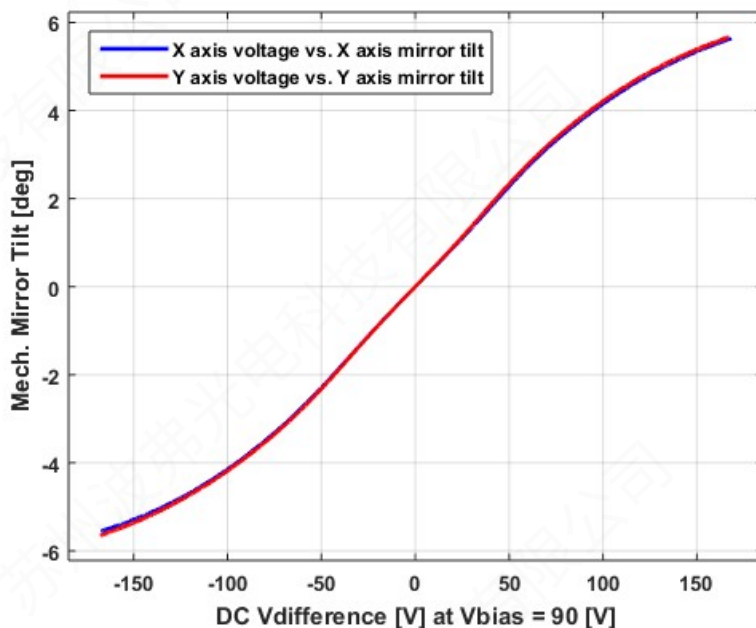
Quality Factor - Y Axis : 76.5000

Recommended LPF Cutoff Frequency (6th Order Bessel) [Hz] : 500

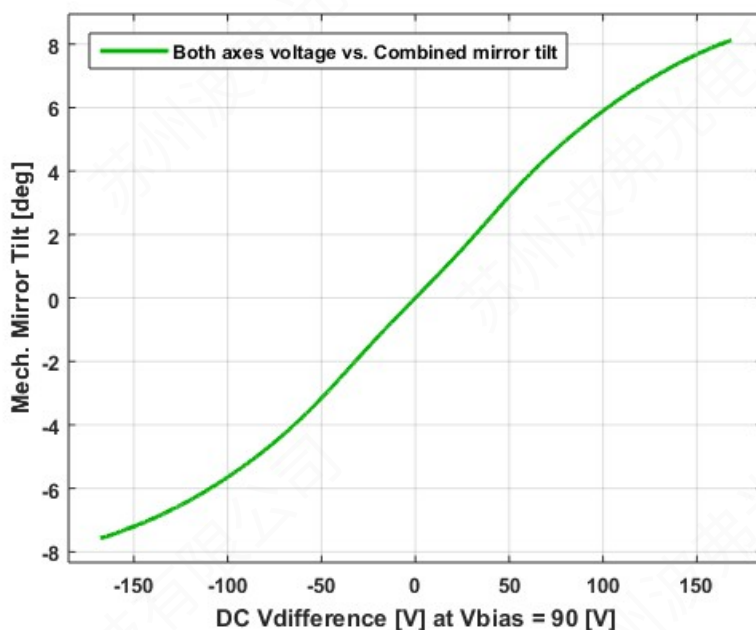
Date and Time Report was Created: 14-Nov-2019 at 17:34:51

Static Response

Voltage vs. Mech. Angle - Individual Axes

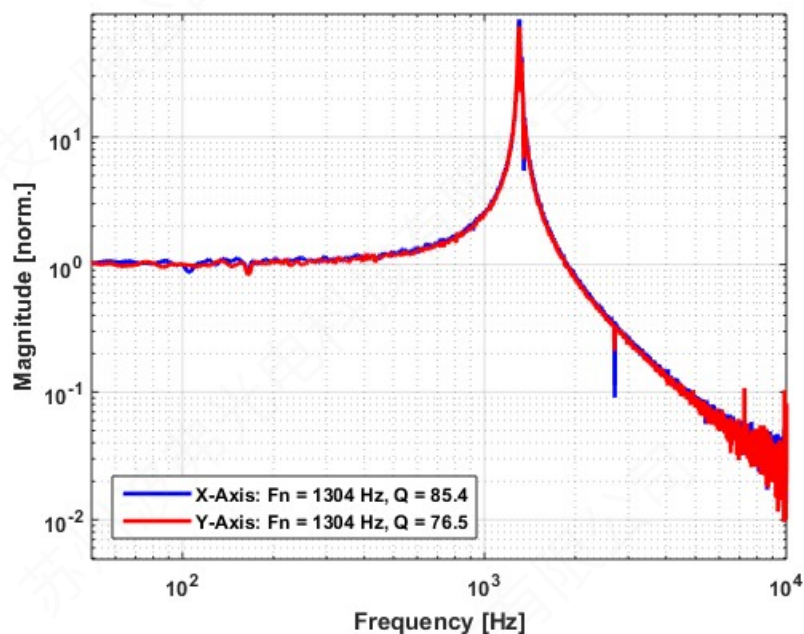


Voltage vs. Mech. Angle - Coupled Axes

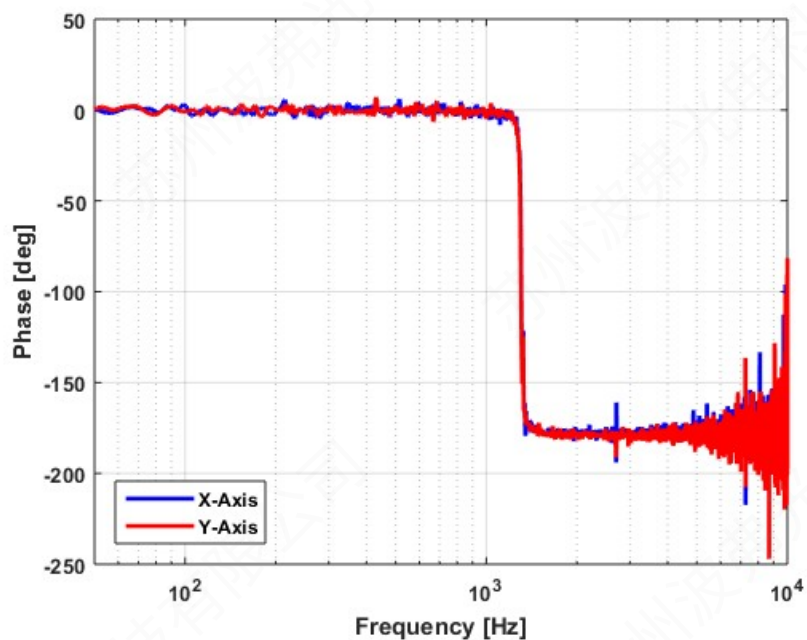


Frequency Response

Small Signal Frequency Response - Magnitude

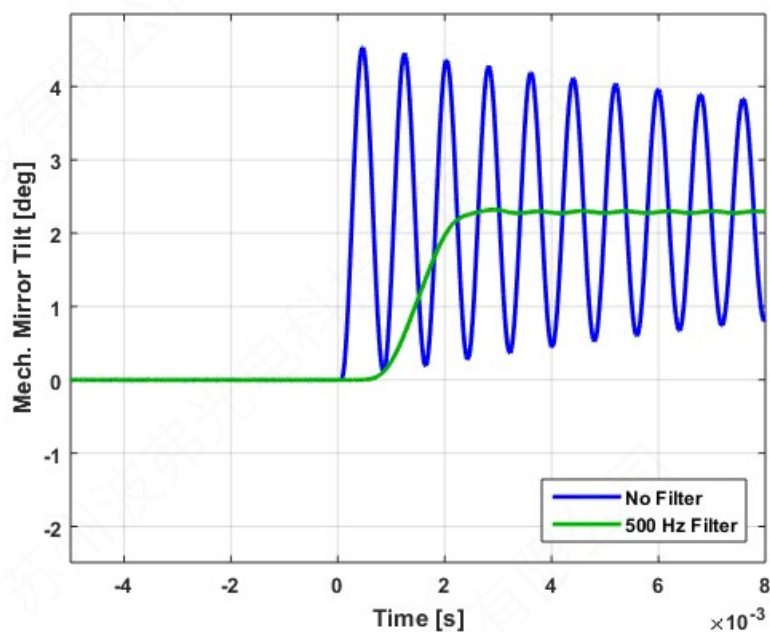


Small Signal Frequency Response - Phase

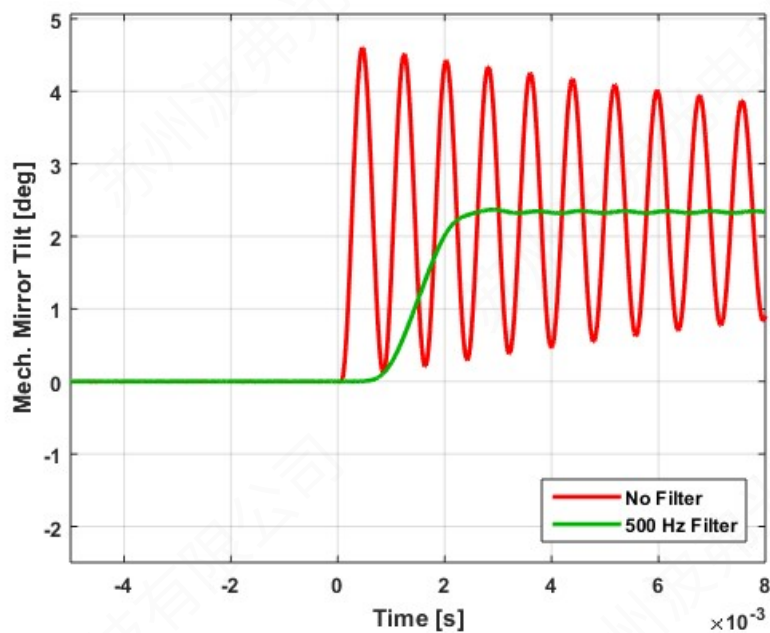


Step Response

X-Axis Step Response

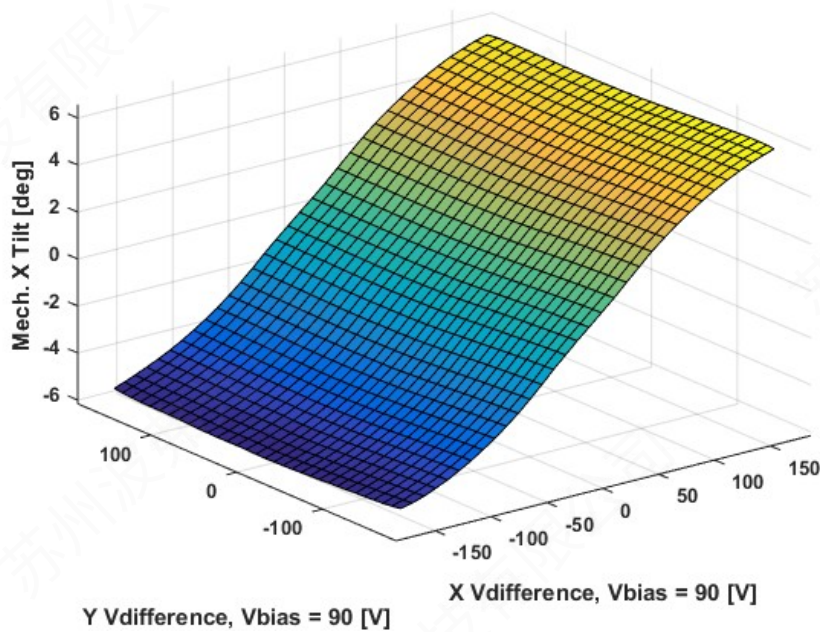


Y-Axis Step Response

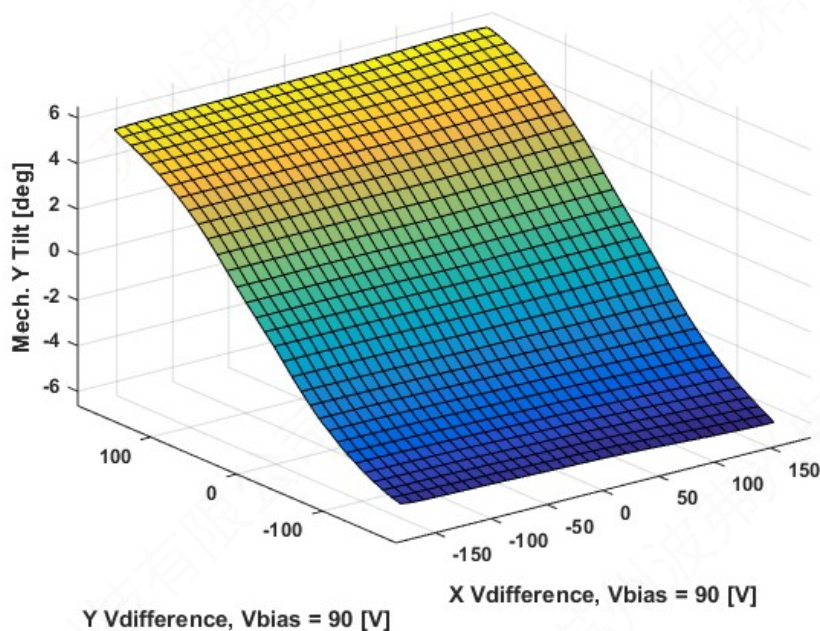


2D Lookup Tables

Voltage vs. X Mech. Angle - Lookup Table



Voltage vs. Y Mech. Angle - Lookup Table



Y vs. X Tilt - Addressable Mech. Angles

