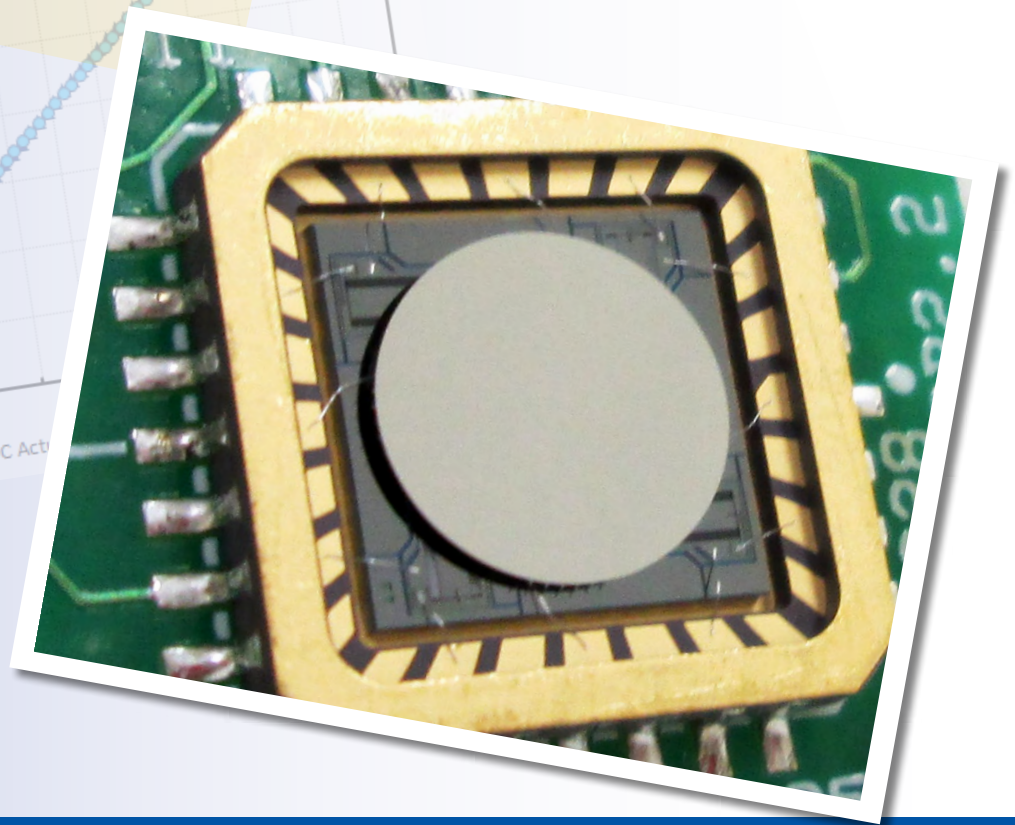
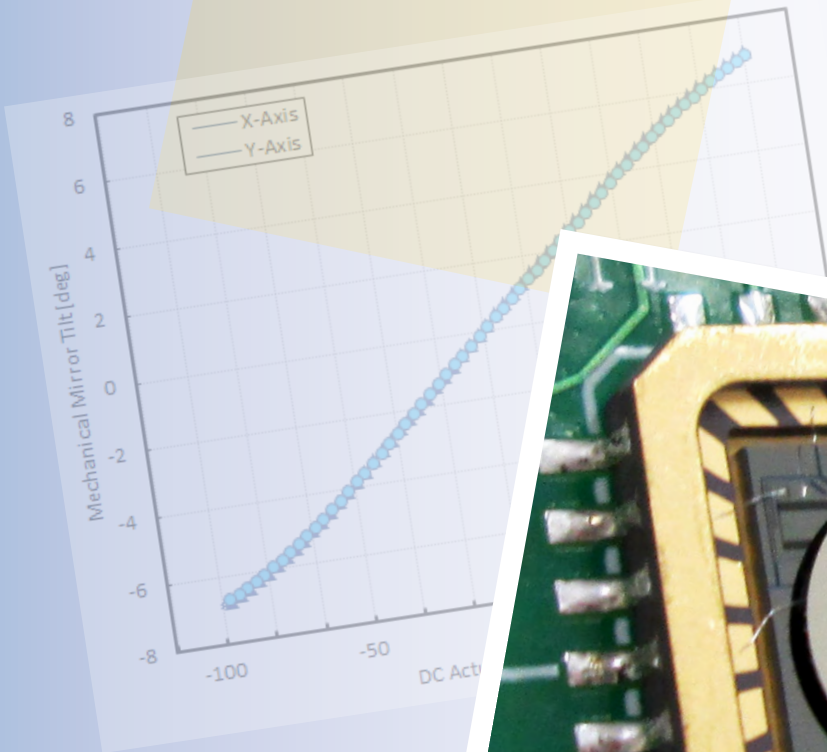


Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheets
S4342



Device Parameters Summary

Device ID : S4342

Actuator Name : A7M20.1

Actuator Type : 4-Quadrant (Two-Axis, Bidirectional)

Mirror Type and Size : Integrated mirror of 2000um diameter

Mirror Coating : Aluminum

Maximum Angle - X Axis [degrees] : 5.1283

Maximum Angle - Y Axis [degrees] : 5.1064

Maximum Voltage - X Axis [V] : 158

Maximum Voltage - Y Axis [V] : 158

Bias Voltage [V] : 80

Maximum Angle - Coupled Axes [degrees] : 6.5301

Resonant Frequency - X Axis [Hz] : 1296

Resonant Frequency - Y Axis [Hz] : 1292

Quality Factor- X Axis : 49

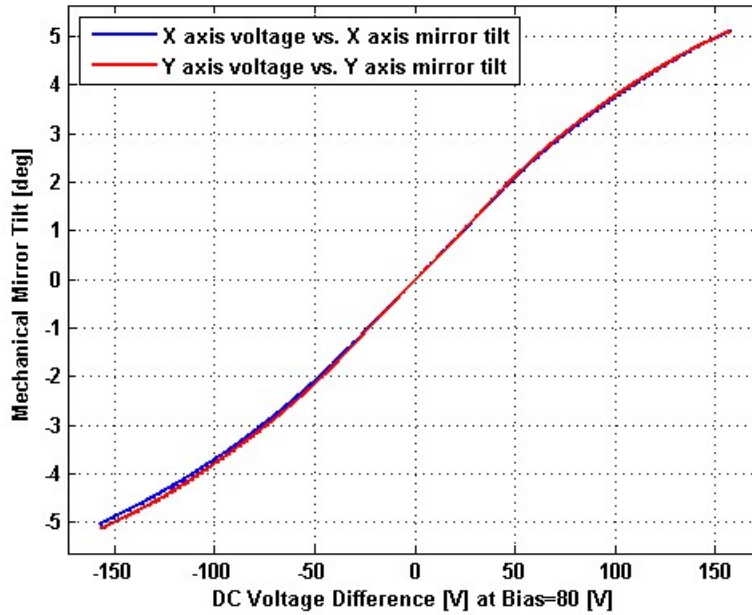
Quality Factor - Y Axis : 45

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

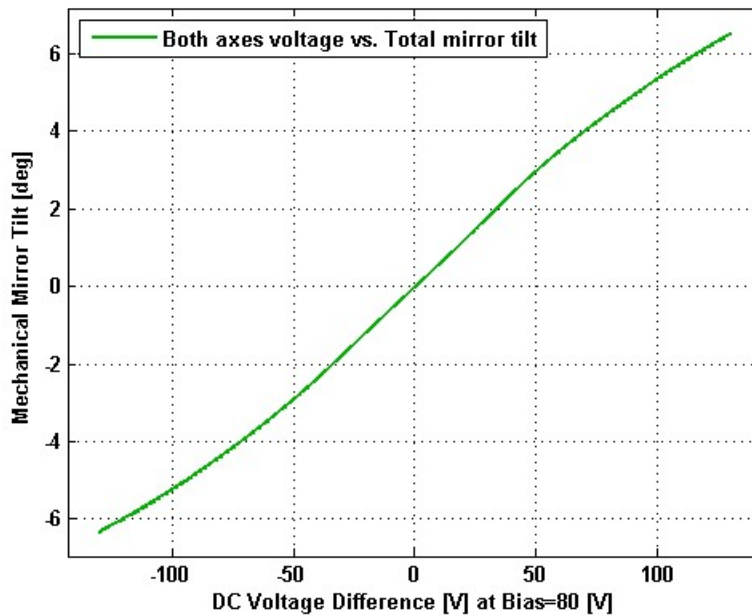
Date and Time Report was Created: 17-Feb-2015 at 19:12:27

Static Response

Voltage vs. Angle - Individual Axes

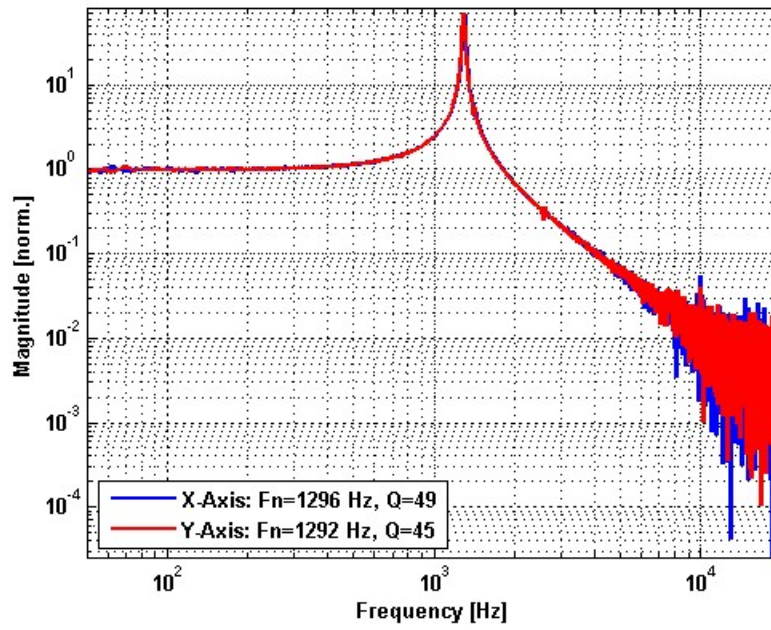


Voltage vs. Angle - Coupled Axes

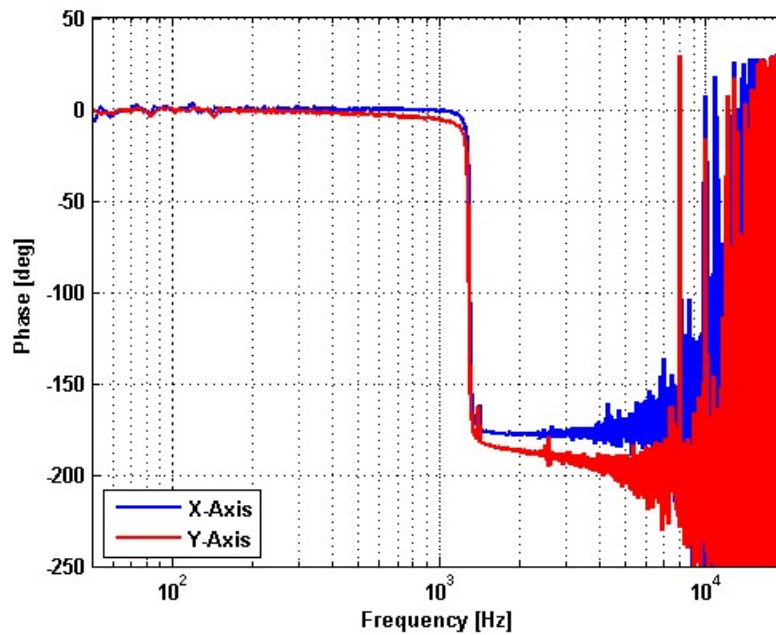


Frequency Response

Small Signal Frequency Response - Magnitude

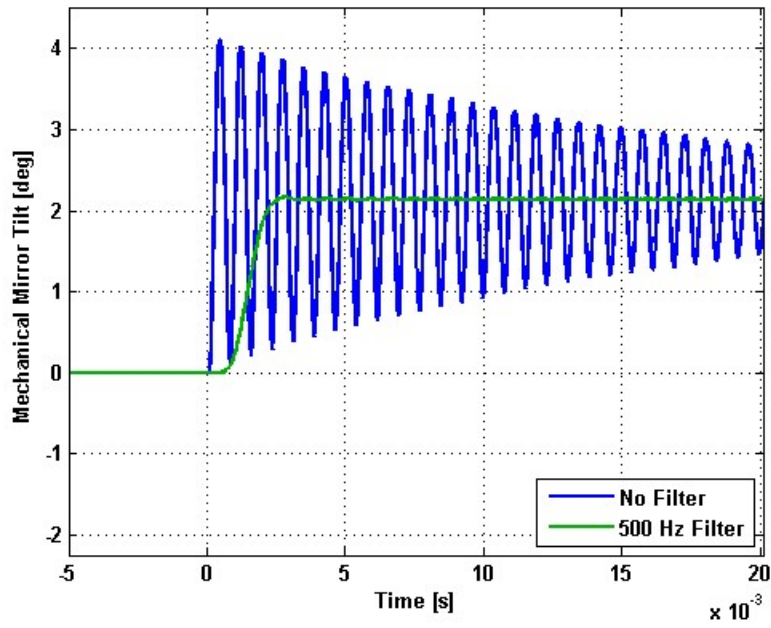


Small Signal Frequency Response - Phase

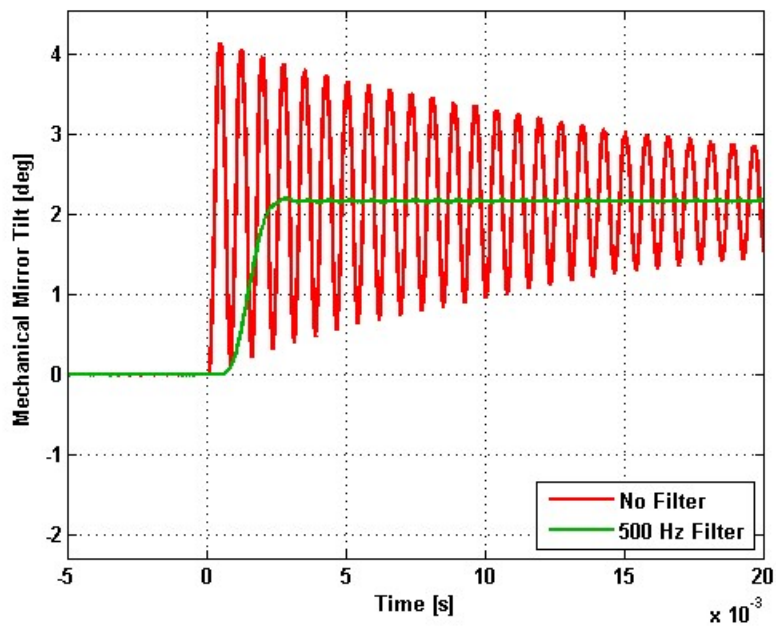


Step Response

X-Axis Step Response

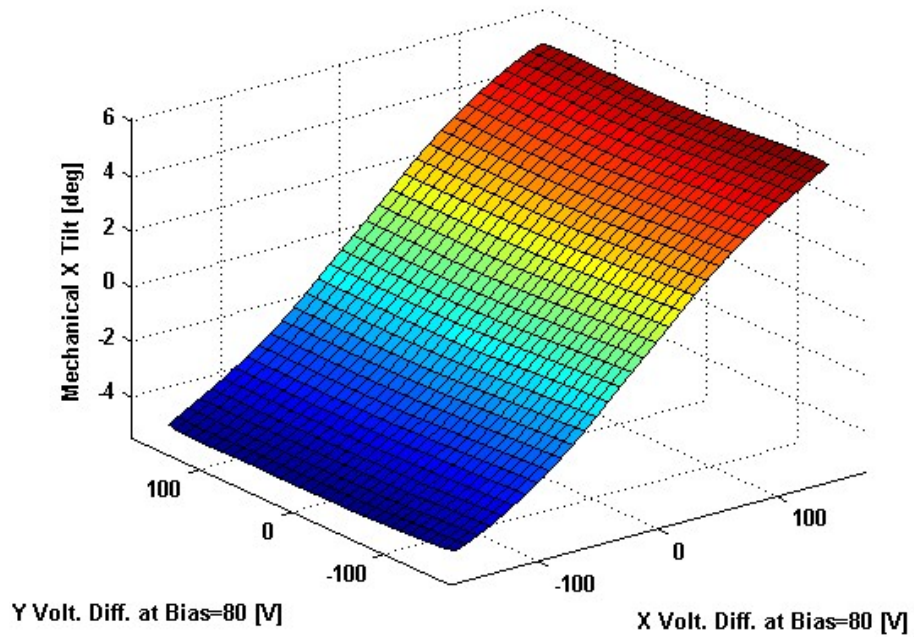


Y-Axis Step Response

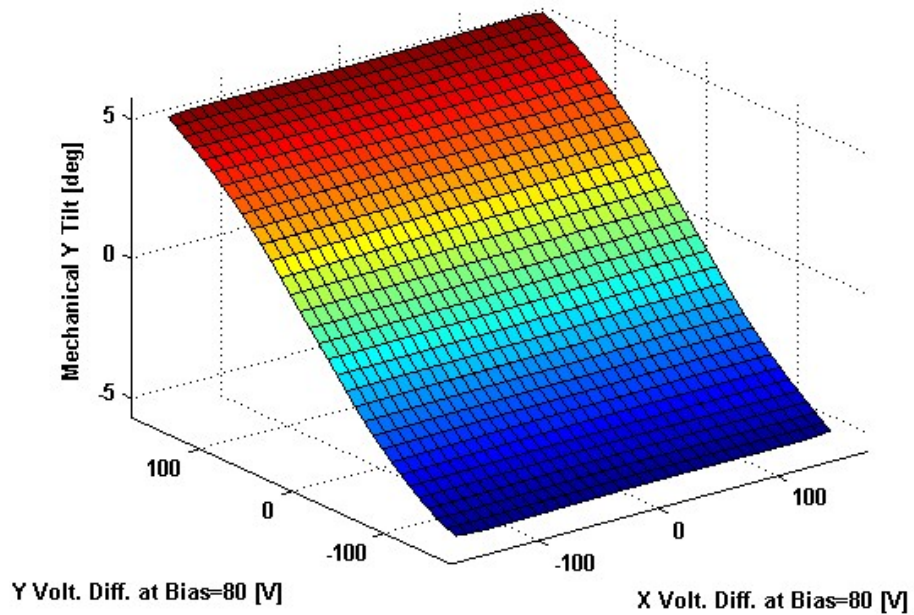


2D Lookup Tables

Voltage vs. X Angle - Lookup Table



Voltage vs. Y Angle - Lookup Table



Y Angle vs. X Angle - Addressable Angles

