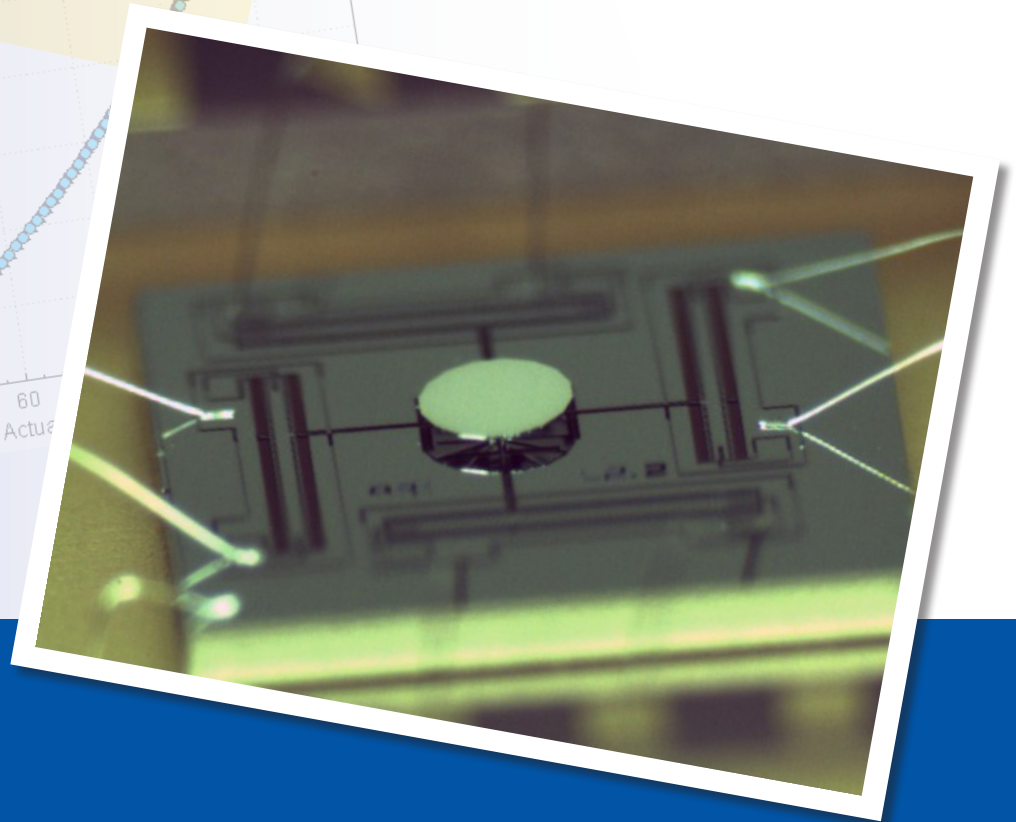
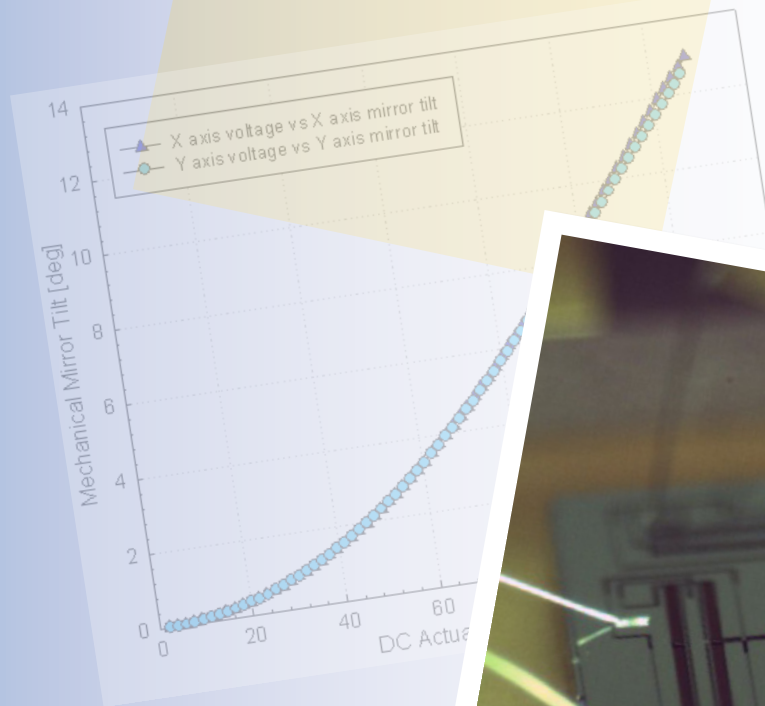


Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheets
S1423



Device Parameters Summary

Device ID : S1423DB

Actuator Type : A1112.2

Mirror Type and Size : Integrated mirror of 1200um diameter

Mirror Coating : Al-coated

Maximum Angle - X Axis [degrees] : 4.6329

Maximum Angle - Y Axis [degrees] : 4.6275

Maximum Voltage - X Axis [V] : 131

Maximum Voltage - Y Axis [V] : 131

Maximum Angle - Coupled Axes [degrees] : 5.9471

Resonant Frequency - X Axis [Hz] : 2568

Resonant Frequency - Y Axis [Hz] : 2607

Quality Factor- X Axis : 50

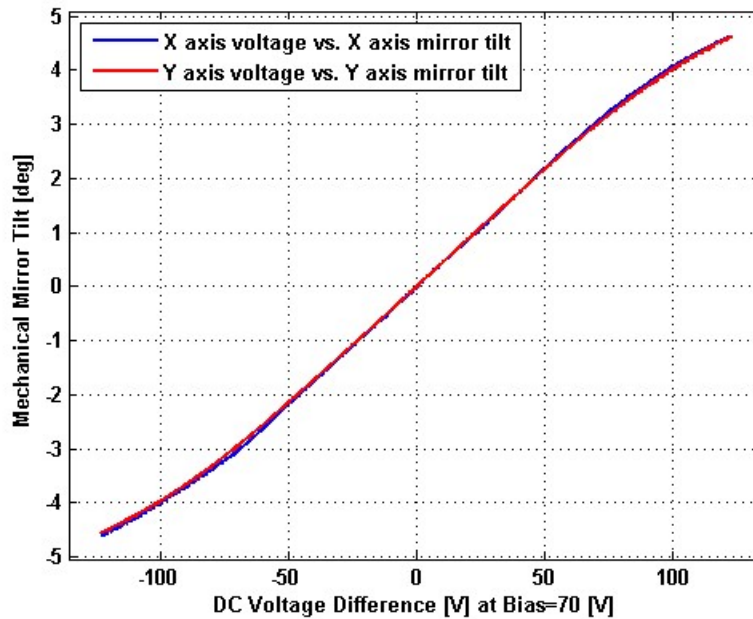
Quality Factor - Y Axis : 49

Recommended LPF Cutoff Frequency (6th Order Bessel) : 1000

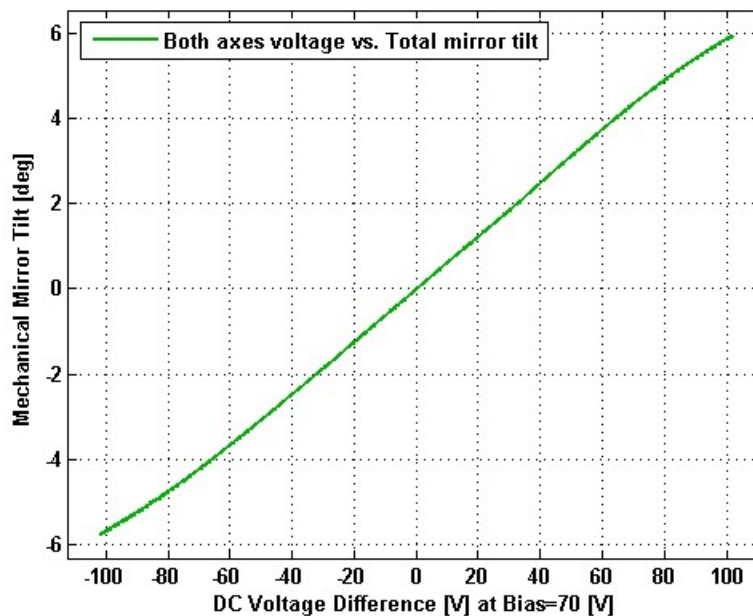
Created 1:53 pm 14 September 2011

Static Response

Voltage vs. Angle - Individual Axes

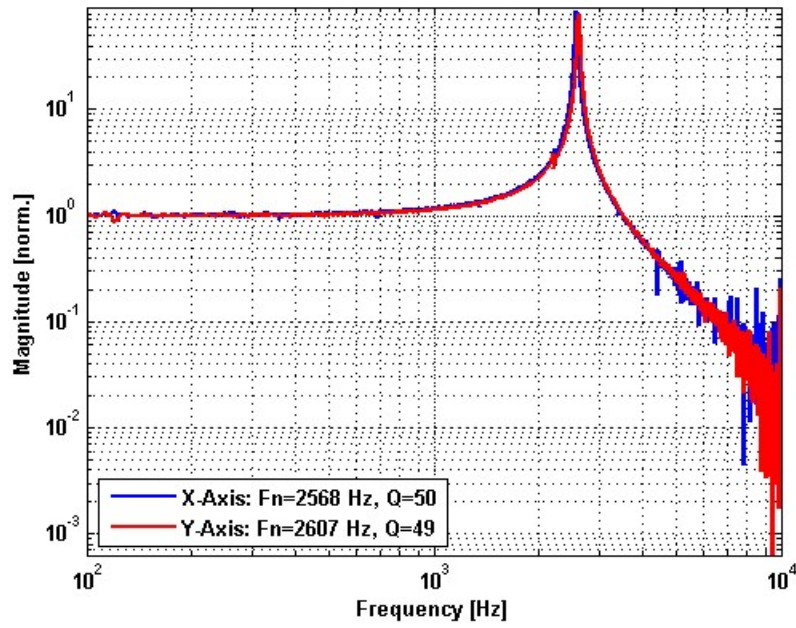


Voltage vs. Angle - Coupled Axes

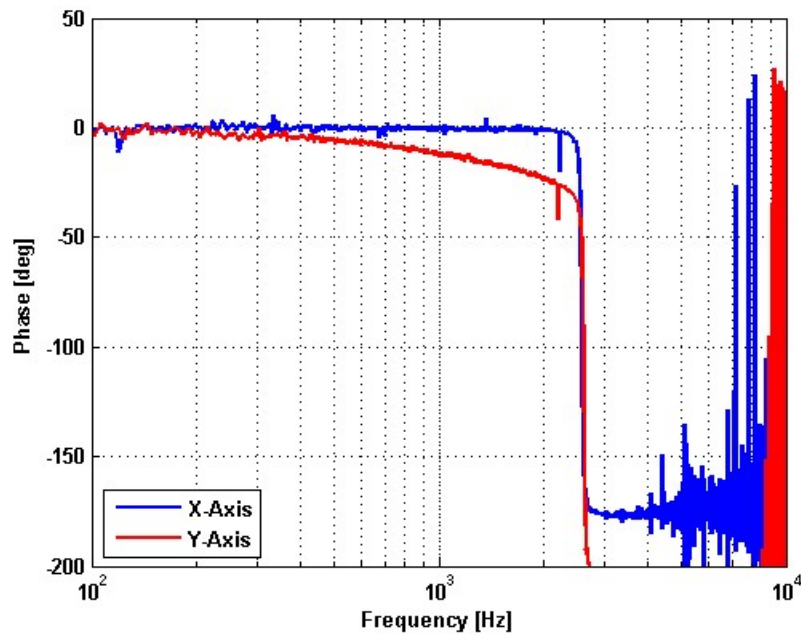


Frequency Response

Small Signal Frequency Response - Magnitude

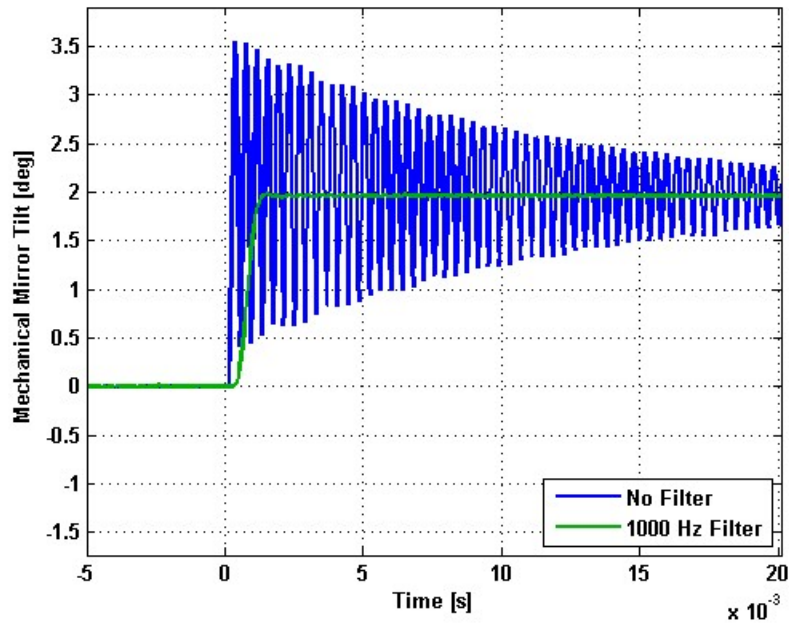


Small Signal Frequency Response - Phase

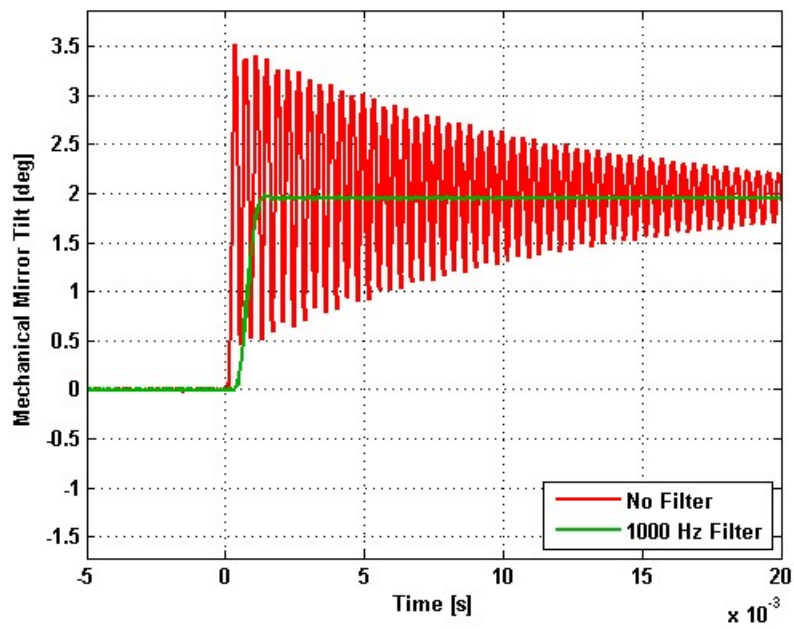


Step Response

X-Axis Step Response

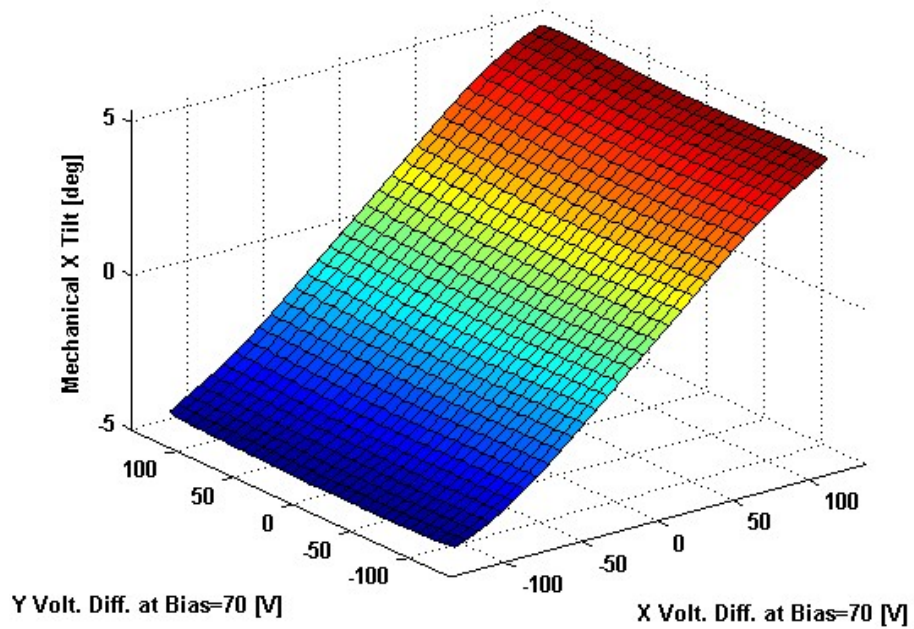


Y-Axis Step Response

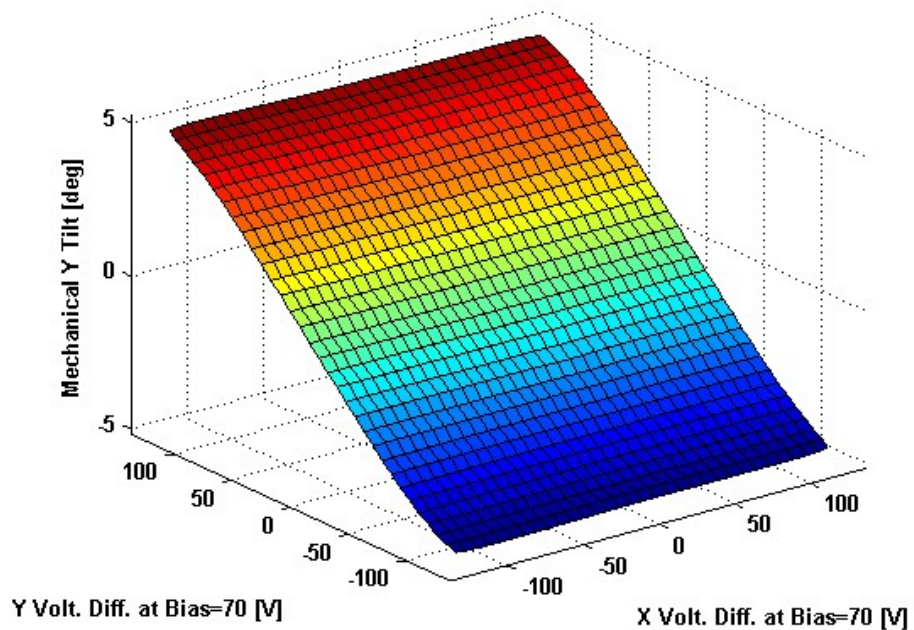


2D Lookup Tables

Voltage vs. X Angle - Lookup Table



Voltage vs. Y Angle - Lookup Table



Y Angle vs. X Angle - Addressable Angles

