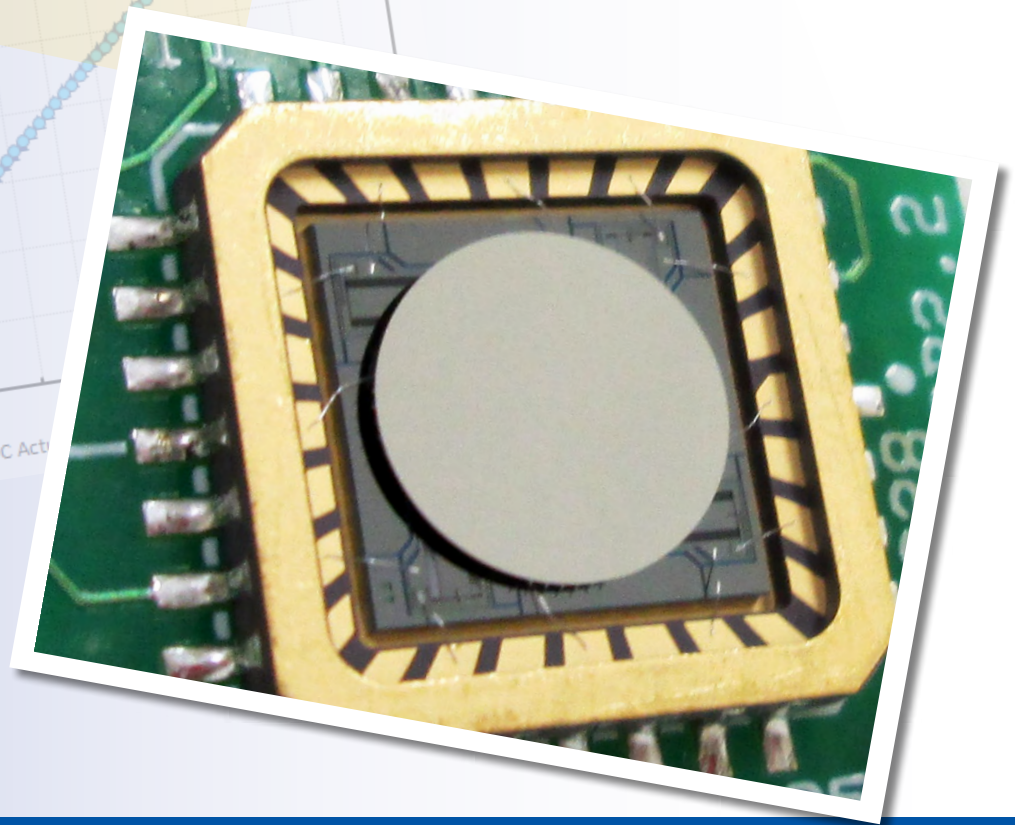
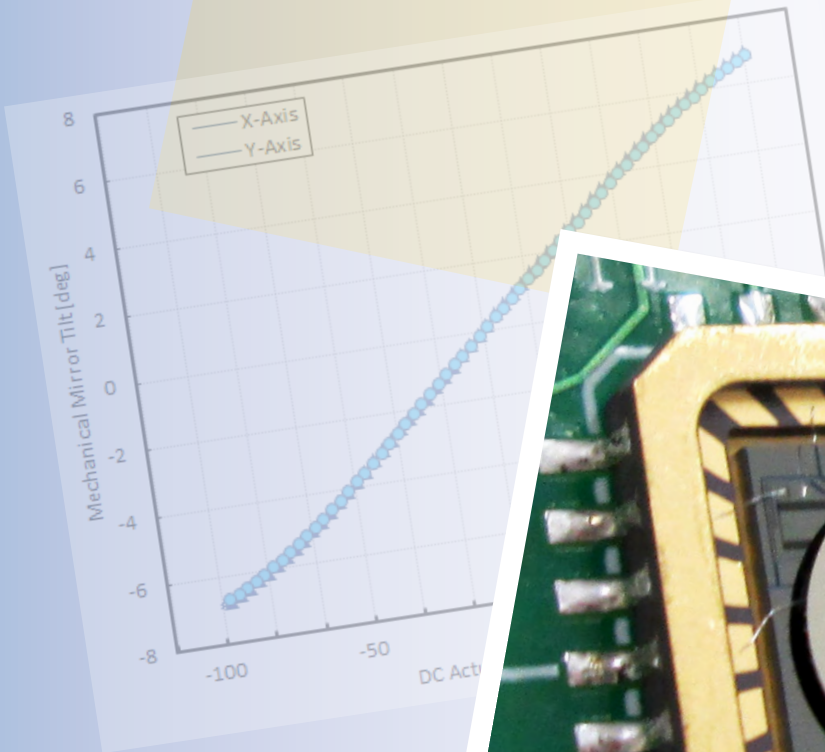


Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S4413



Device Parameters Summary

Device ID : S4413

Actuator Name : A7B1.1

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

Mirror Type and Size : Bonded mirror of 3.6mm diameter

Mirror Coating : Gold

Maximum Angle - X Axis [degrees] : 6.6005

Maximum Angle - Y Axis [degrees] : 6.5649

Maximum Voltage - X Axis [V] : 140

Maximum Voltage - Y Axis [V] : 139

Bias Voltage [V] : 80

Maximum Angle - Coupled Axes [degrees] : 8.4045

Resonant Frequency - X Axis [Hz] : 303

Resonant Frequency - Y Axis [Hz] : 300

Quality Factor- X Axis : 19

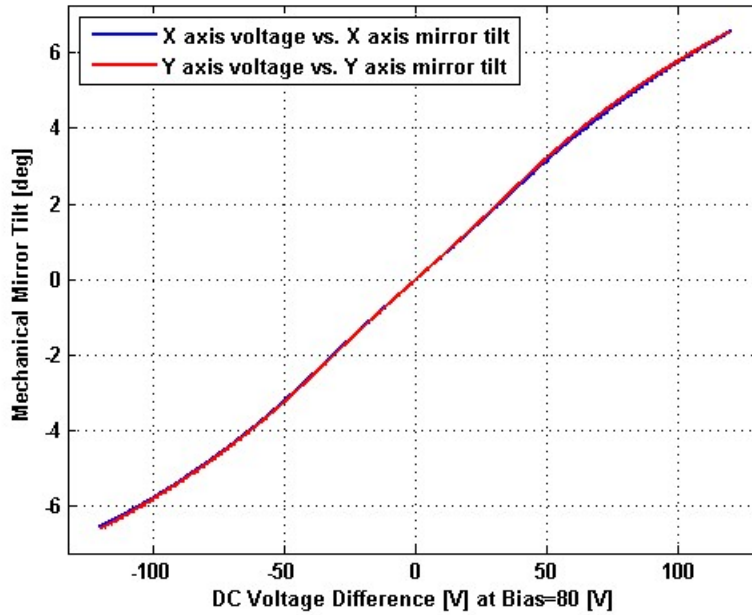
Quality Factor - Y Axis : 16

Recommended LPF Cutoff Frequency (6th Order Bessel) : 130

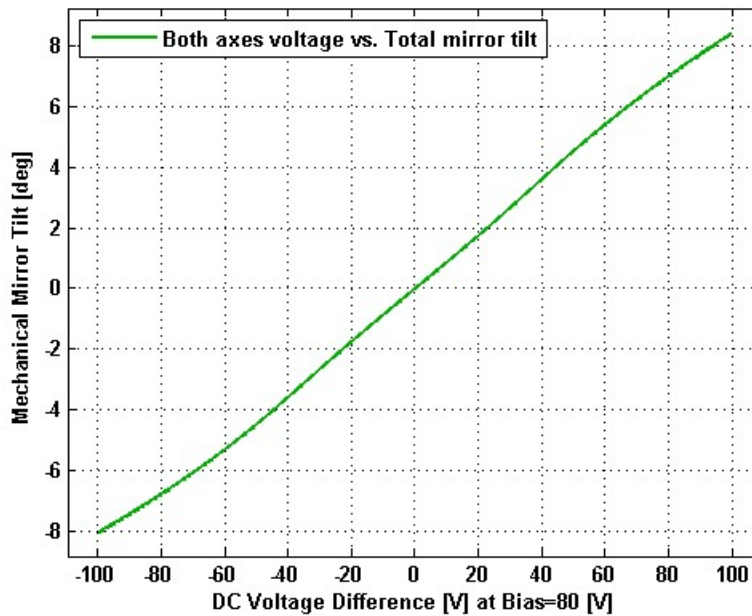
Date and Time Report was Created: 27-Feb-2015 at 14:7:23

Static Response

Voltage vs. Angle - Individual Axes

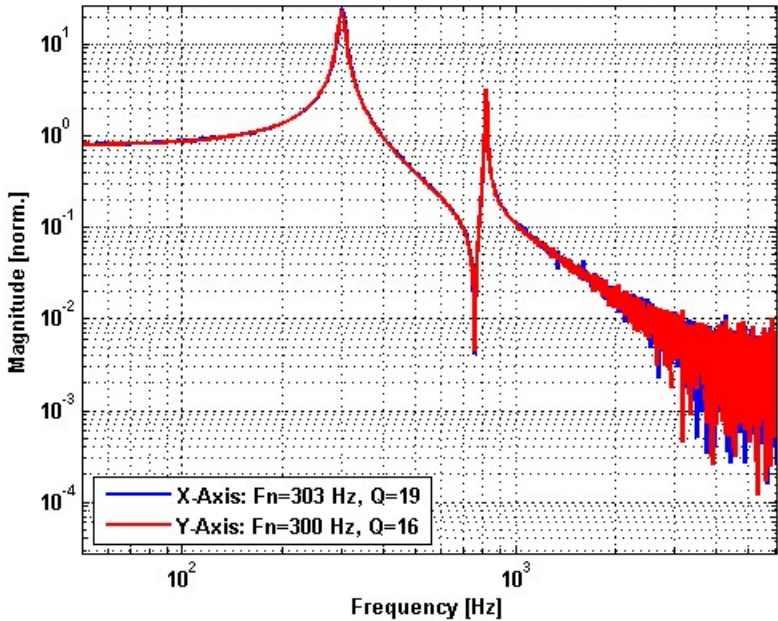


Voltage vs. Angle - Coupled Axes

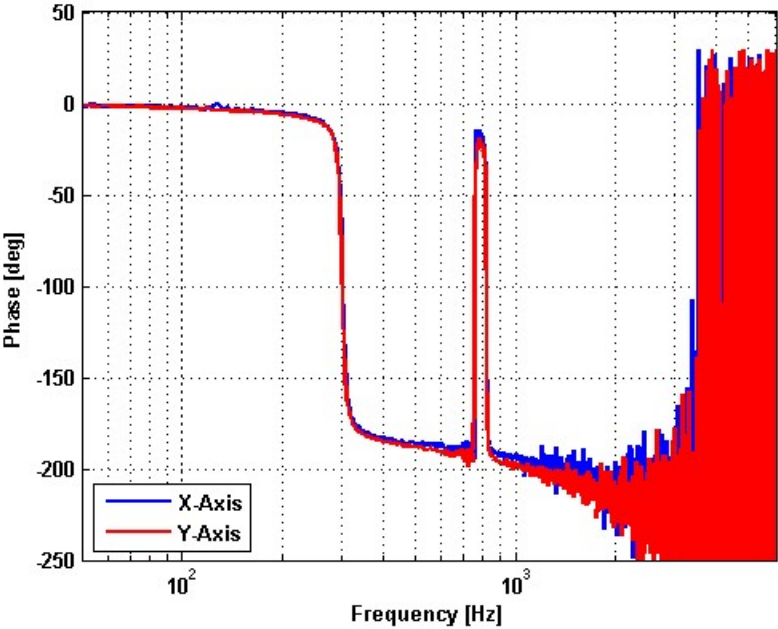


Frequency Response

Small Signal Frequency Response - Magnitude

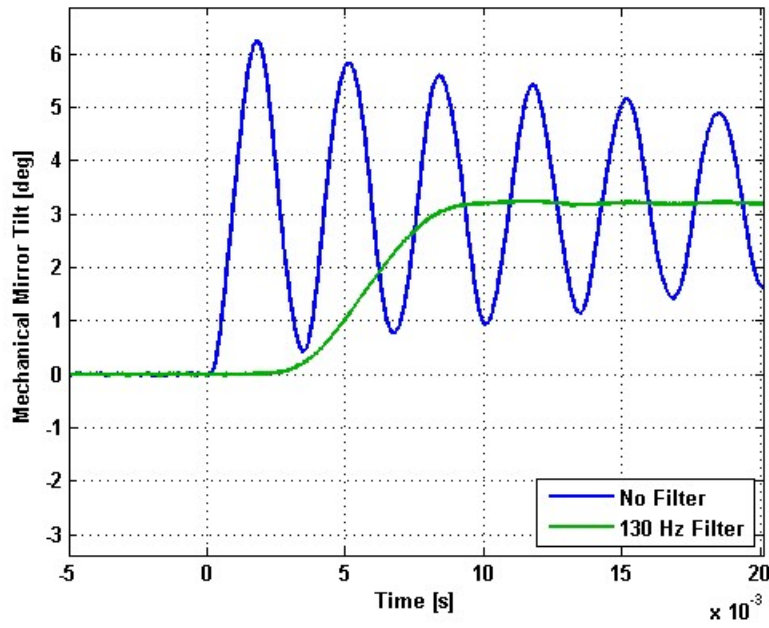


Small Signal Frequency Response - Phase

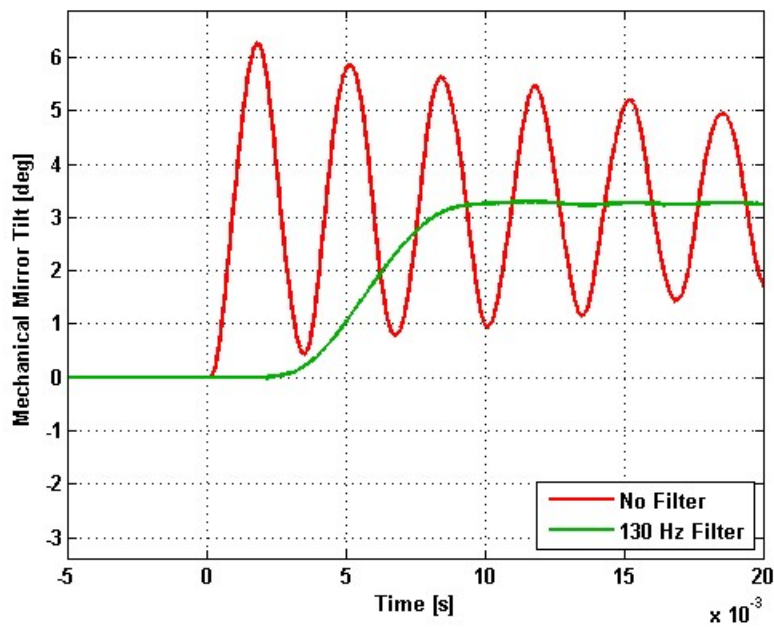


Step Response

X-Axis Step Response

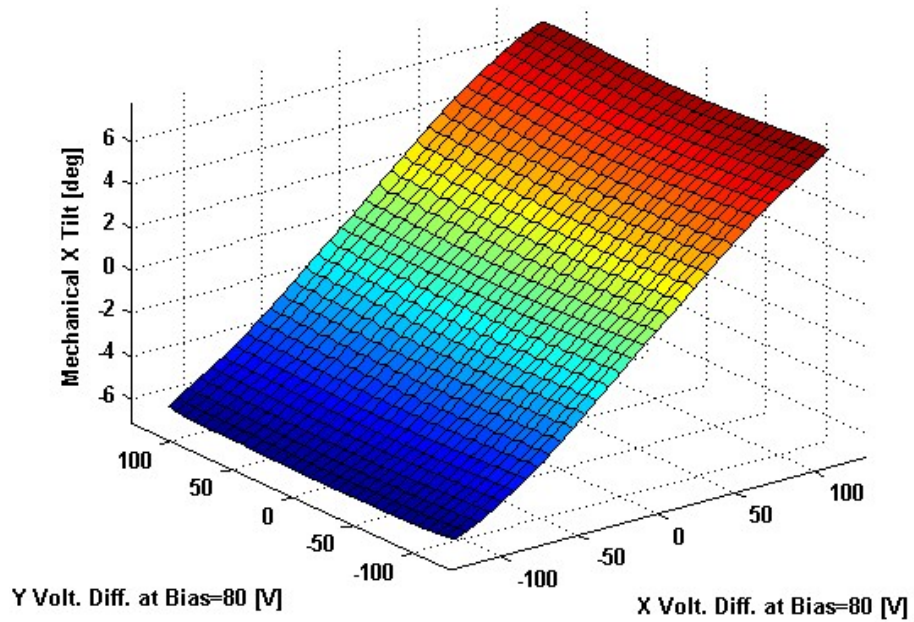


Y-Axis Step Response

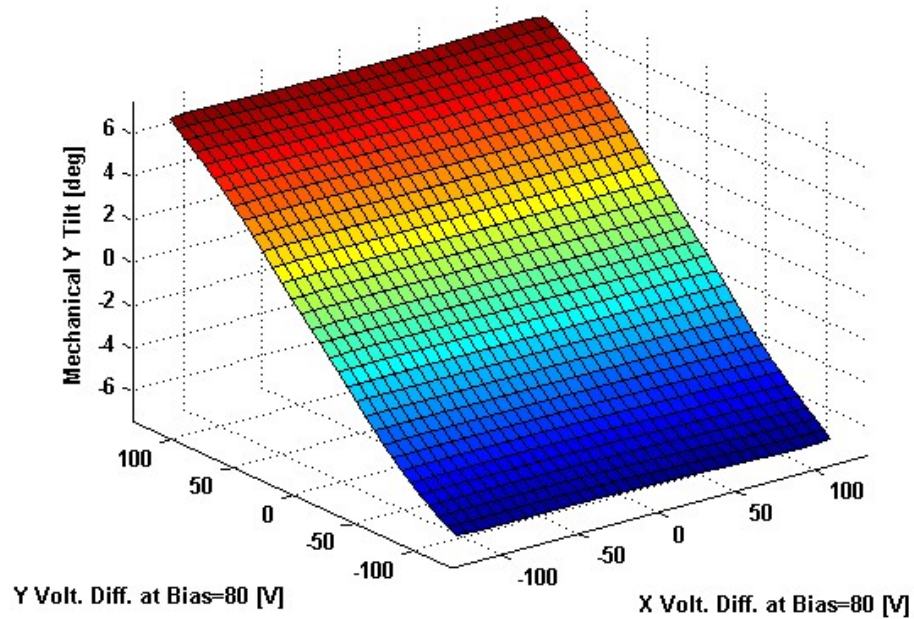


2D Lookup Tables

Voltage vs. X Angle - Lookup Table



Voltage vs. Y Angle - Lookup Table



Y Angle vs. X Angle - Addressable Angles

