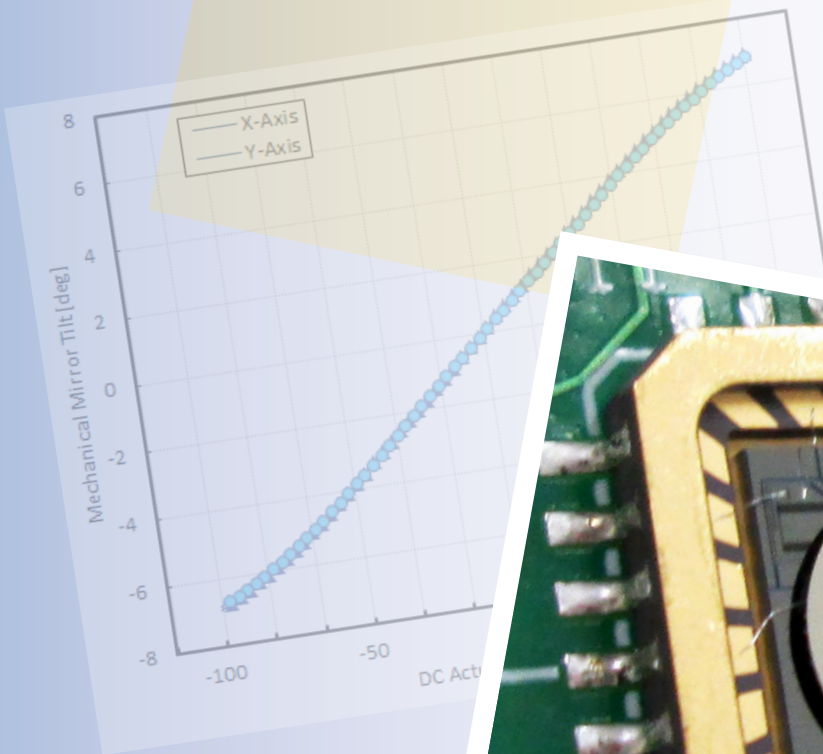




Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S4944



Device Parameters Summary

Device ID : S4944

Actuator Name : A7B1.1

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

Mirror Type and Size : Bonded mirror of 2.4mm diameter

Mirror Coating : Gold

Maximum Angle - X Axis [degrees] : 7.3026

Maximum Angle - Y Axis [degrees] : 7.3957

Maximum Voltage - X Axis [V] : 149

Maximum Voltage - Y Axis [V] : 149

Bias Voltage [V] : 80

Maximum Angle - Coupled Axes [degrees] : 9.4311

Resonant Frequency - X Axis [Hz] : 598

Resonant Frequency - Y Axis [Hz] : 596

Quality Factor- X Axis : 37

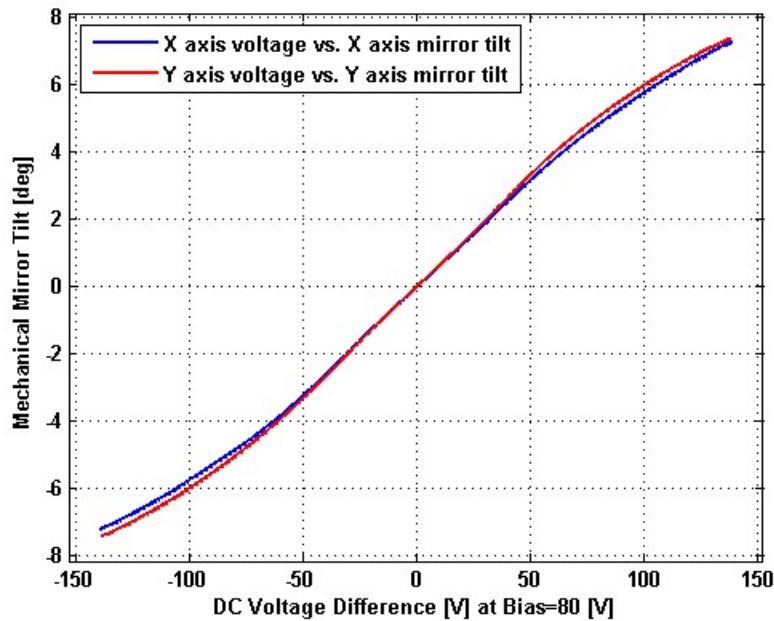
Quality Factor - Y Axis : 37

Recommended LPF Cutoff Frequency (6th Order Bessel) : 230

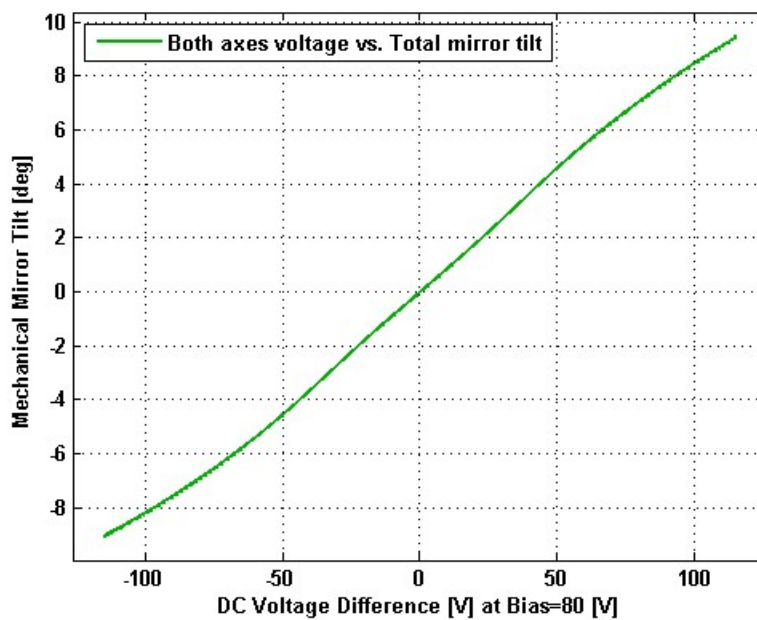
Date and Time Report was Created: 15-Sep-2015 at 12:33:18

Static Response

Voltage vs. Angle - Individual Axes

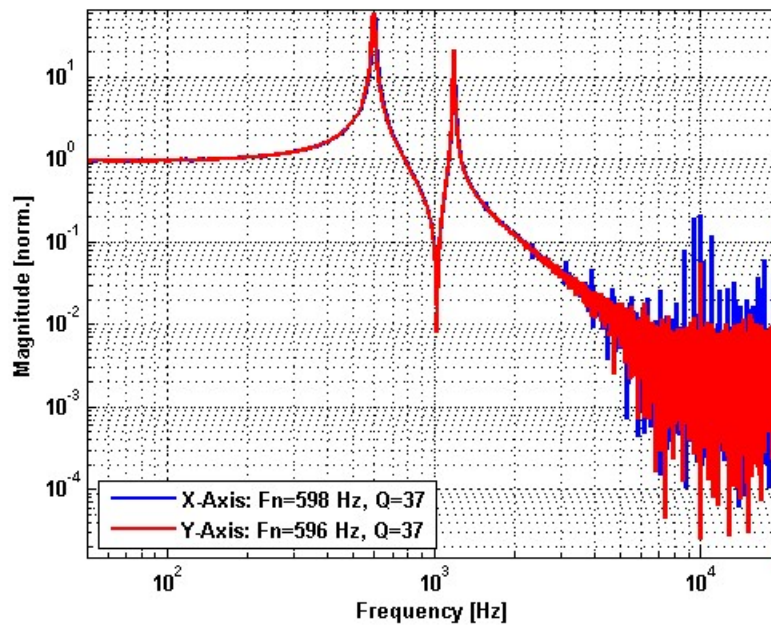


Voltage vs. Angle - Coupled Axes

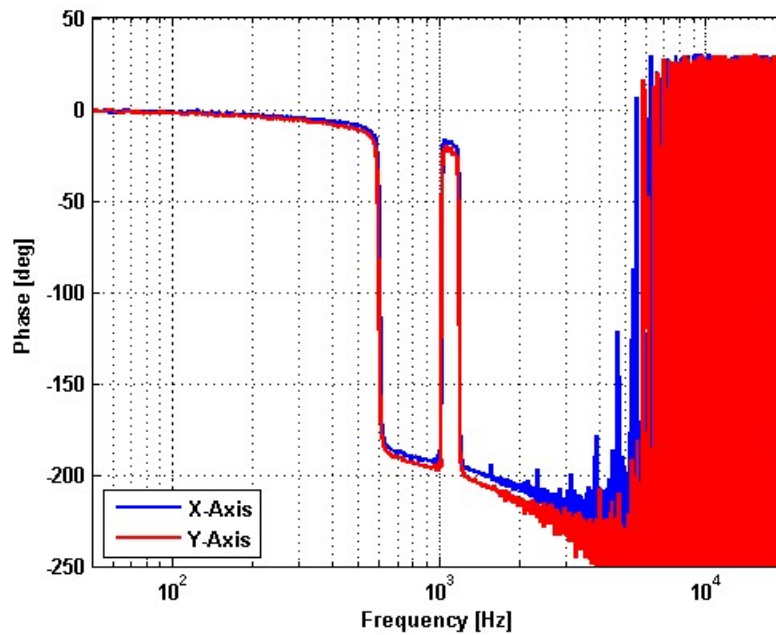


Frequency Response

Small Signal Frequency Response - Magnitude

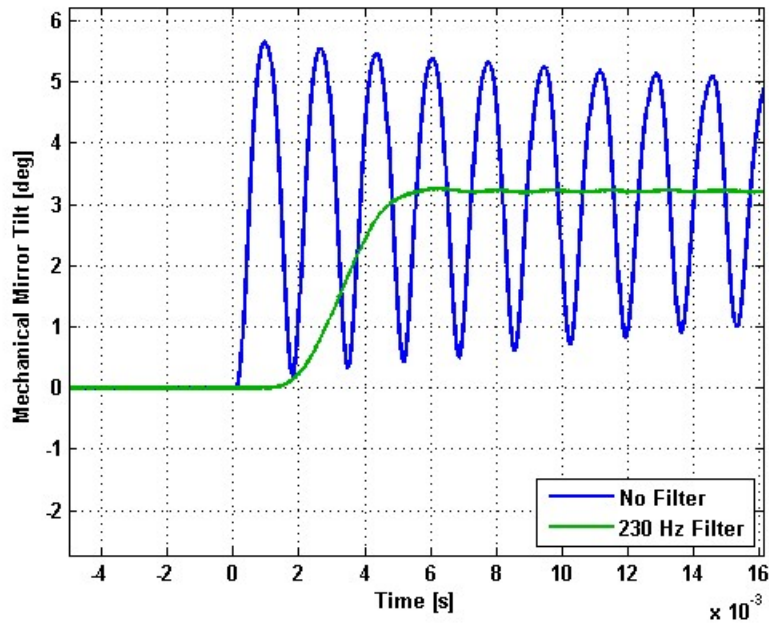


Small Signal Frequency Response - Phase

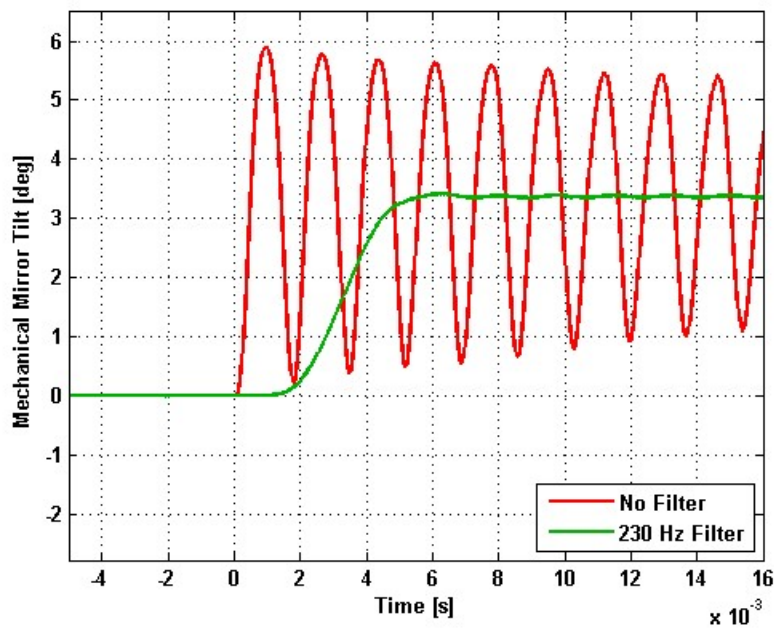


Step Response

X-Axis Step Response

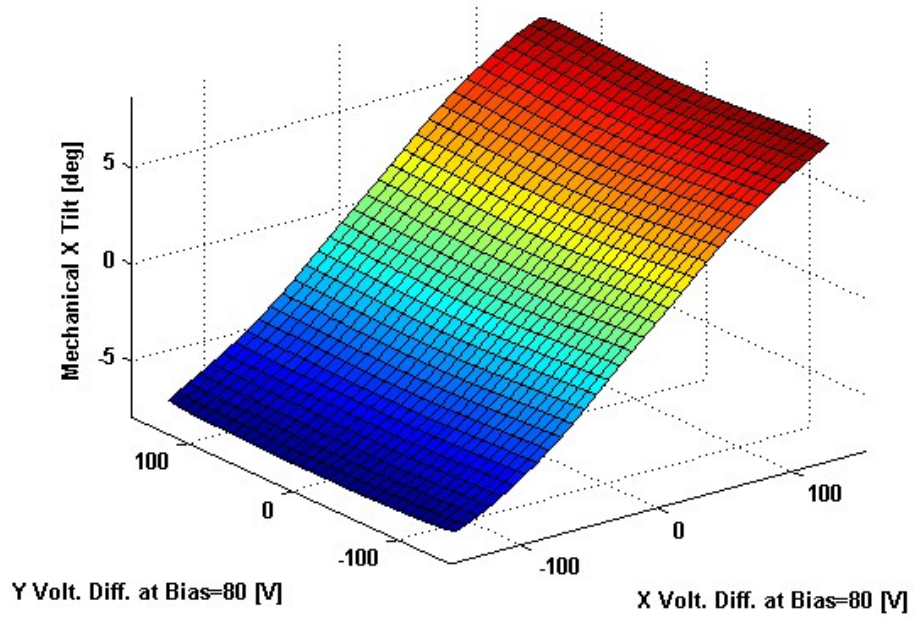


Y-Axis Step Response

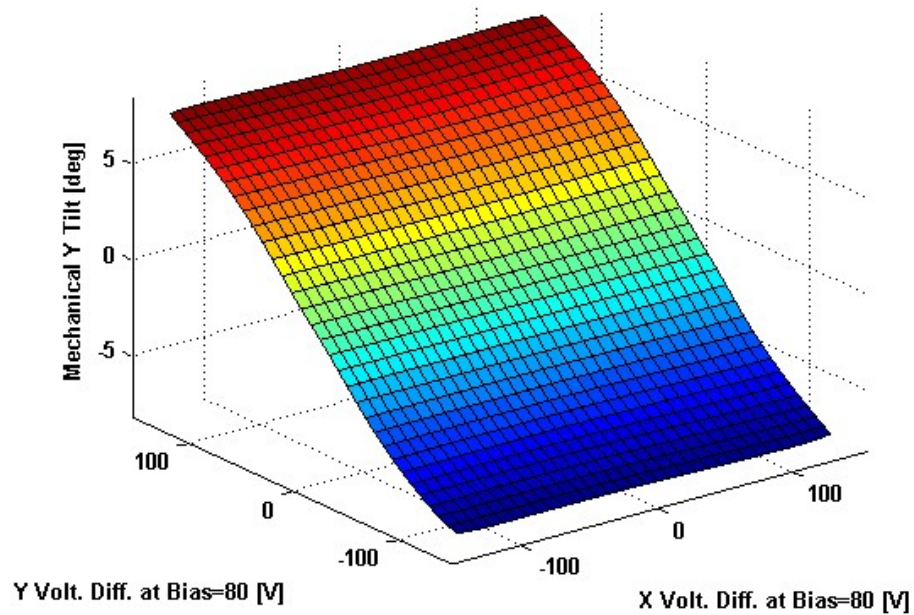


2D Lookup Tables

Voltage vs. X Angle - Lookup Table



Voltage vs. Y Angle - Lookup Table



Y Angle vs. X Angle - Addressable Angles

