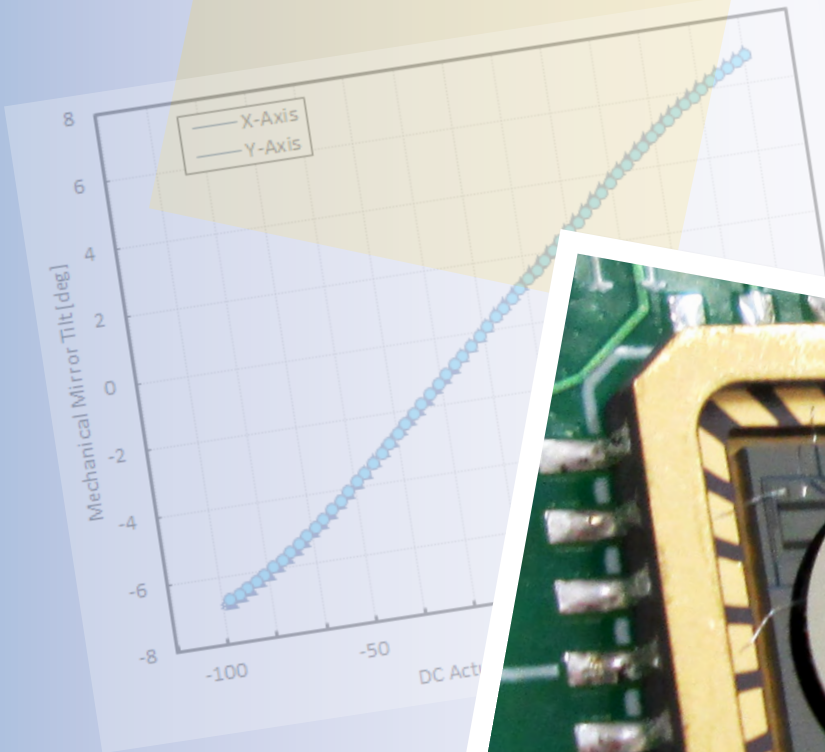




## Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet  
S6032



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# Device Parameters Summary

**Device ID :** S6032

**Actuator Name :** A7B1.1

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

**Mirror Type and Size :** Bonded mirror of 2.0mm diameter

**Mirror Coating :** Aluminum

**Maximum Angle - X Axis [degrees] :** 6.3845

**Maximum Angle - Y Axis [degrees] :** 6.3347

**Maximum Voltage - X Axis [V] :** 135

**Maximum Voltage - Y Axis [V] :** 135

**Bias Voltage [V] :** 70

**Maximum Angle - Coupled Axes [degrees] :** 7.8856

**Resonant Frequency - X Axis [Hz] :** 813

**Resonant Frequency - Y Axis [Hz] :** 815

**Quality Factor- X Axis :** 57

**Quality Factor - Y Axis :** 57

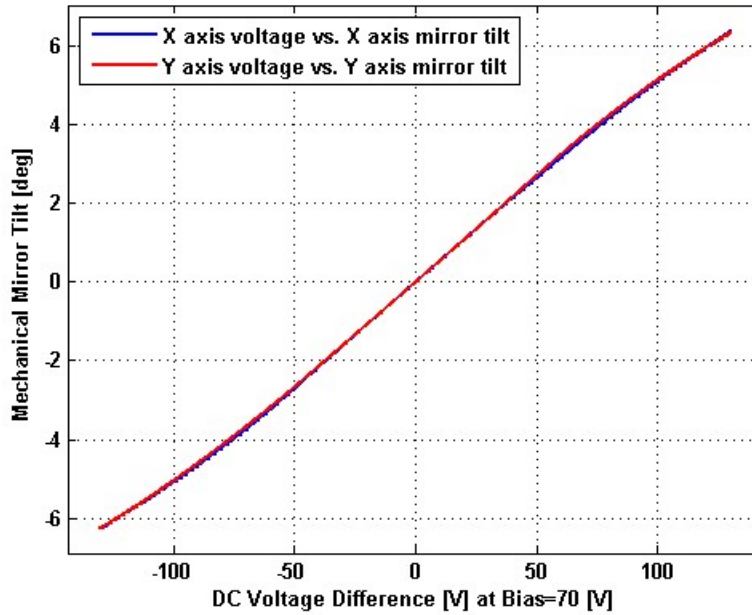
**Recommended LPF Cutoff Frequency (6th Order Bessel) :** 350

**Date and Time Report was Created:** 20-Oct-2016 at 16:4:59

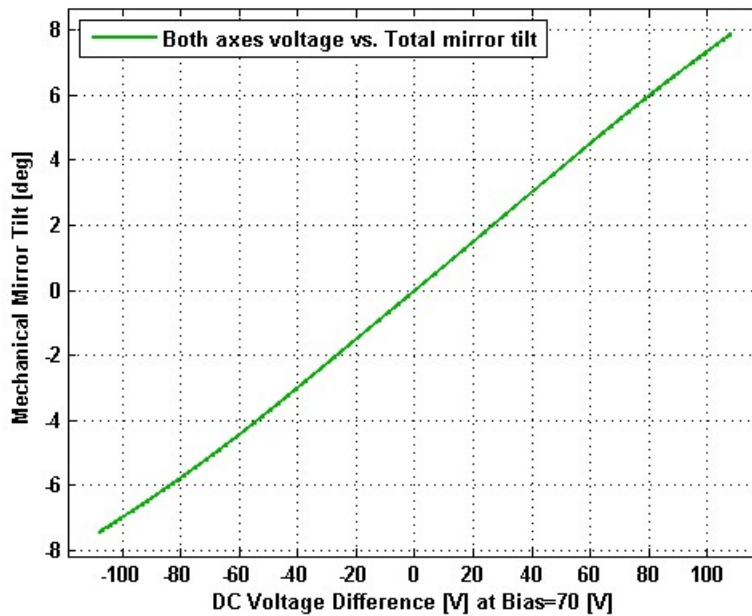
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# Static Response

## Voltage vs. Angle - Individual Axes



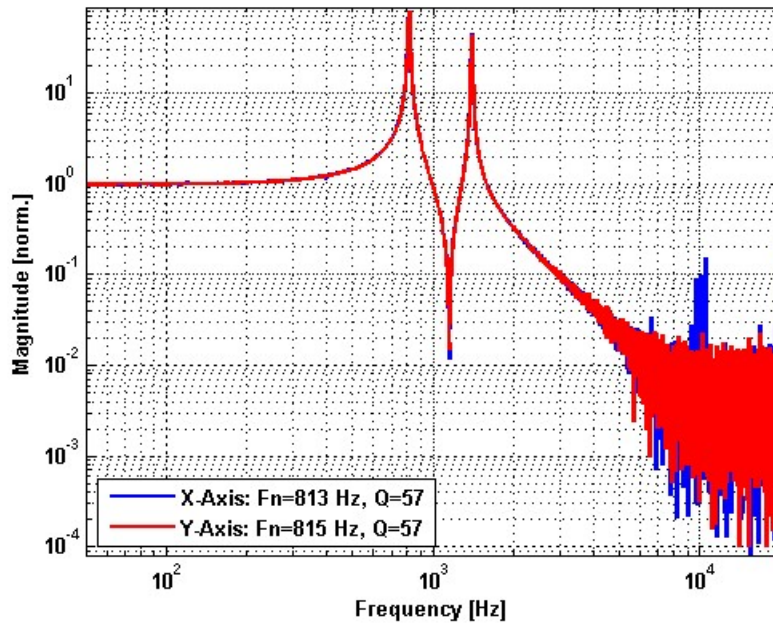
## Voltage vs. Angle - Coupled Axes



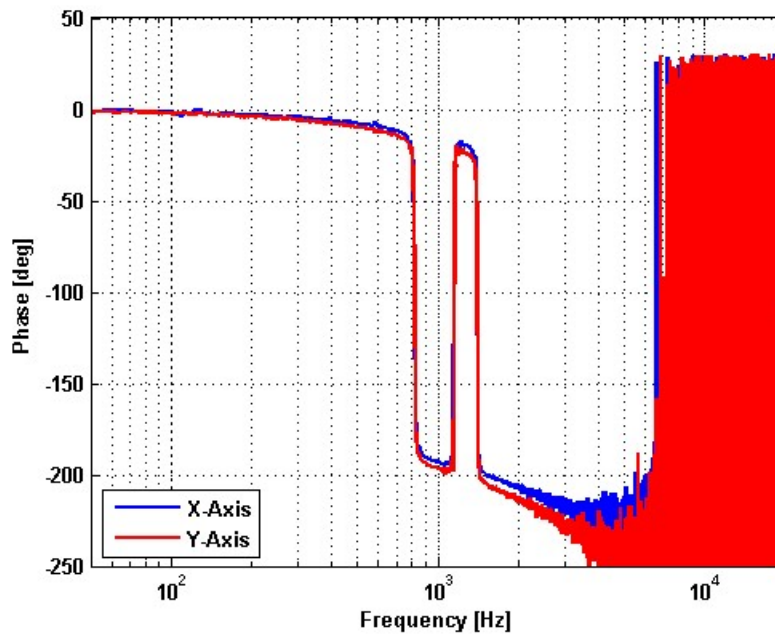
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# Frequency Response

## Small Signal Frequency Response - Magnitude



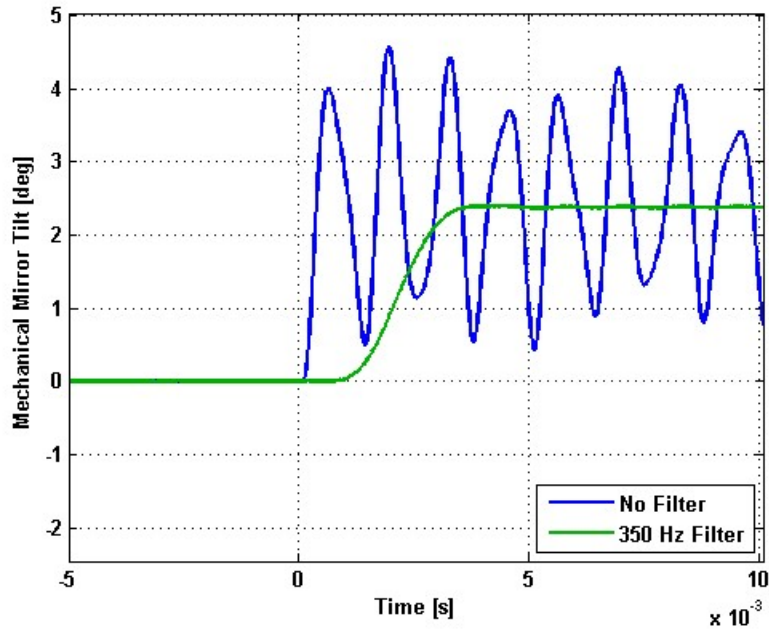
## Small Signal Frequency Response - Phase



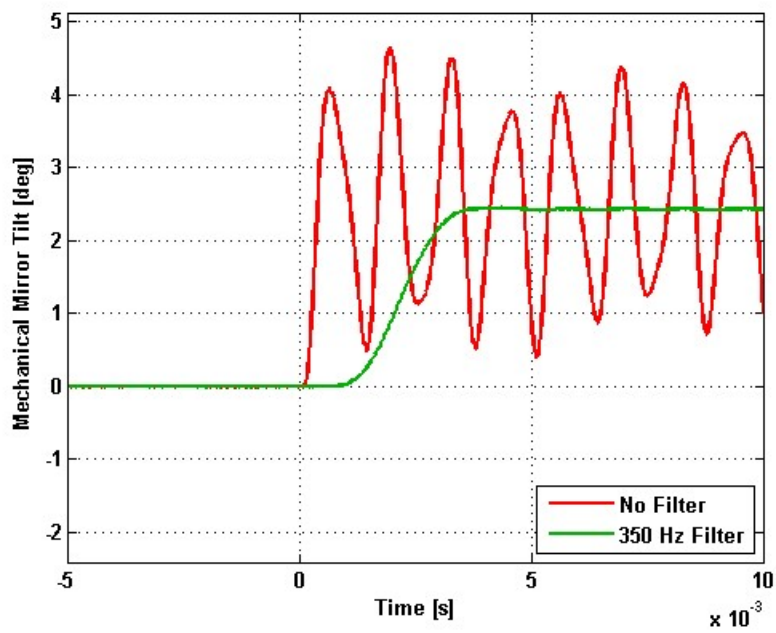
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# Step Response

## X-Axis Step Response



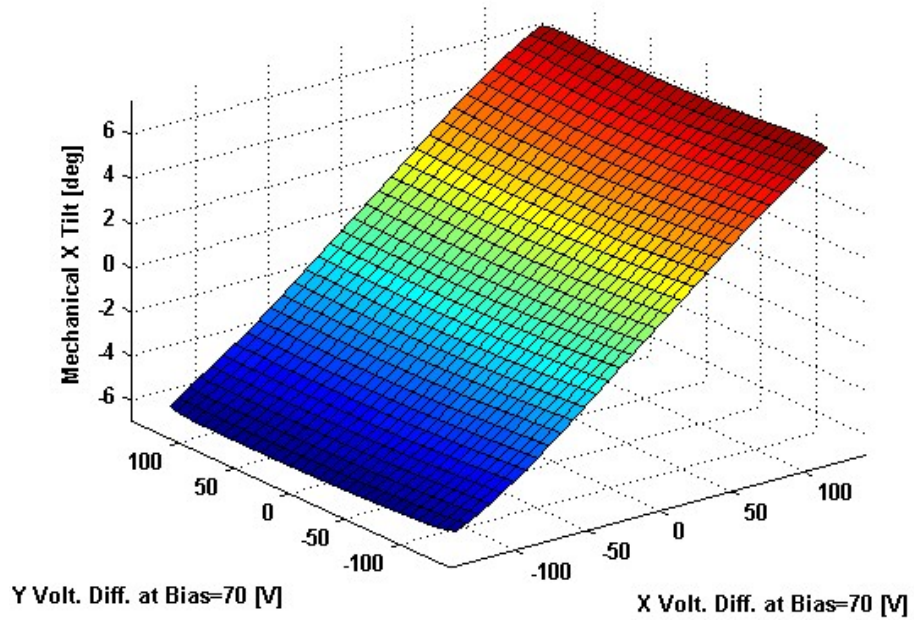
## Y-Axis Step Response



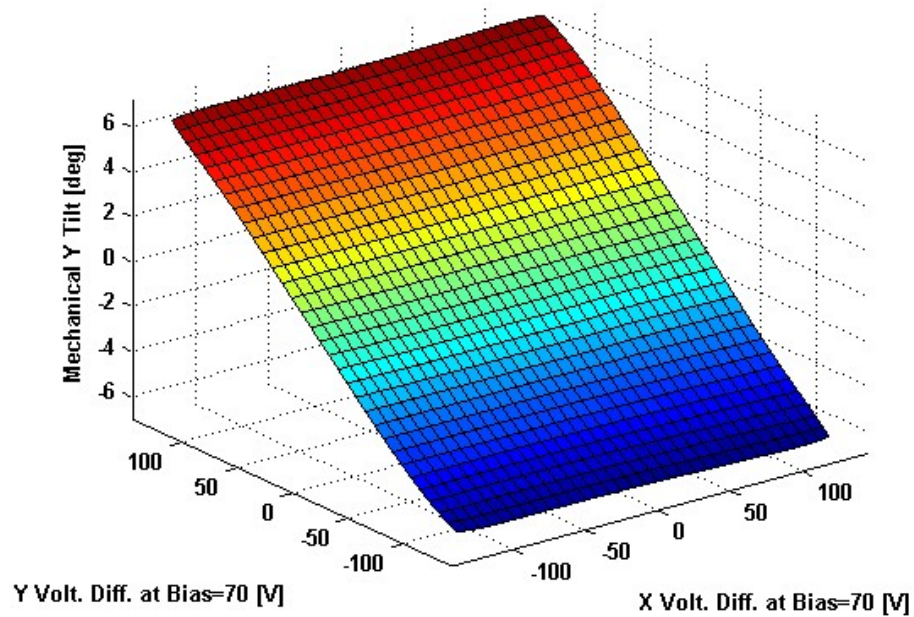
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# 2D Lookup Tables

## Voltage vs. X Angle - Lookup Table



## Voltage vs. Y Angle - Lookup Table



# Y Angle vs. X Angle - Addressable Angles

