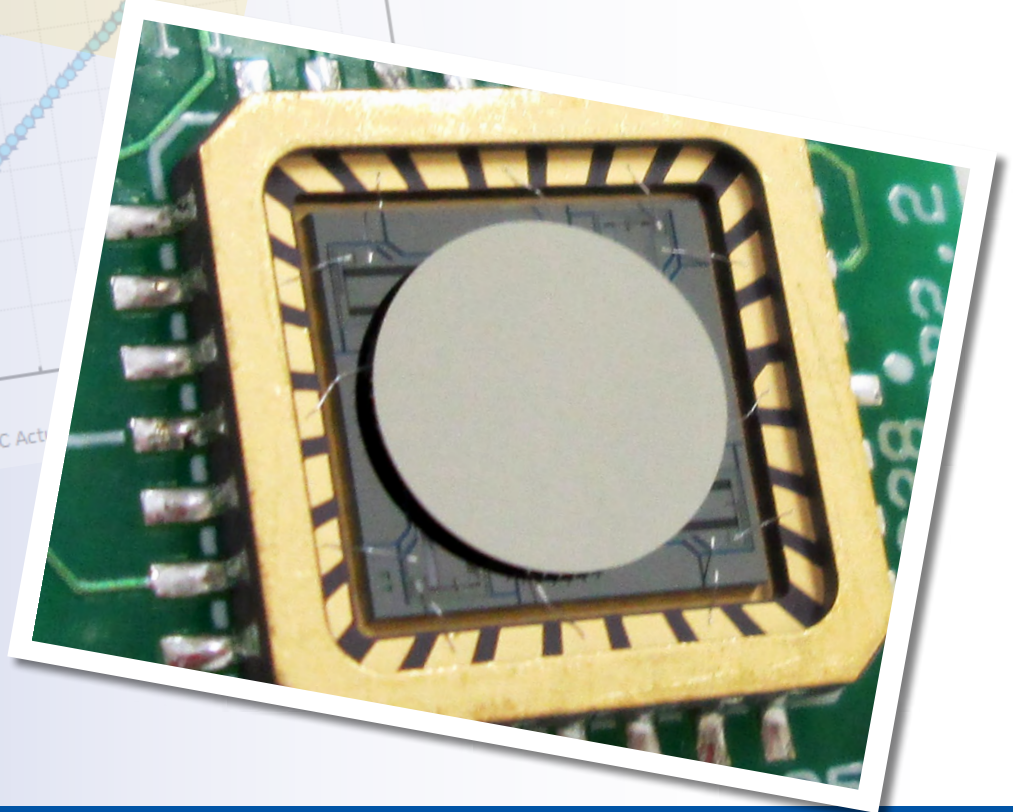
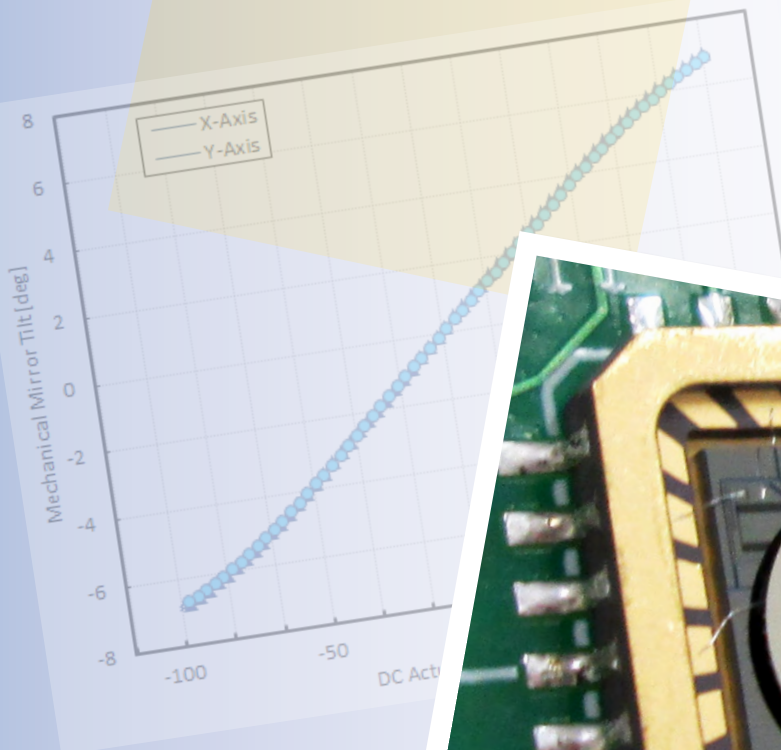


## Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet  
S10000



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# Device Parameters Summary

**Device ID :** S10000

**Actuator Type:** A5L2.2

**Actuator Mode :** Gimbal-less Dual-Axis Quasistatic

**Mirror Type and Size :** Bonded mirror of 3.6mm diameter

**Mirror Coating :** Gold

**Maximum Mech. Angle - X Axis [degrees] :** 1.1812

**Maximum Mech. Angle - Y Axis [degrees] :** 1.1778

**Maximum Vdifference - X Axis [V] :** 155

**Maximum Vdifference - Y Axis [V] :** 155

**Driver Bias Voltage (Vbias) [V] :** 90

**Maximum Mech. Angle - Coupled Axes [degrees] :** 1.4133

**Resonant Frequency - X Axis [Hz] :** 2192

**Resonant Frequency - Y Axis [Hz] :** 2188

**Quality Factor - X Axis :** 102

**Quality Factor - Y Axis :** 98

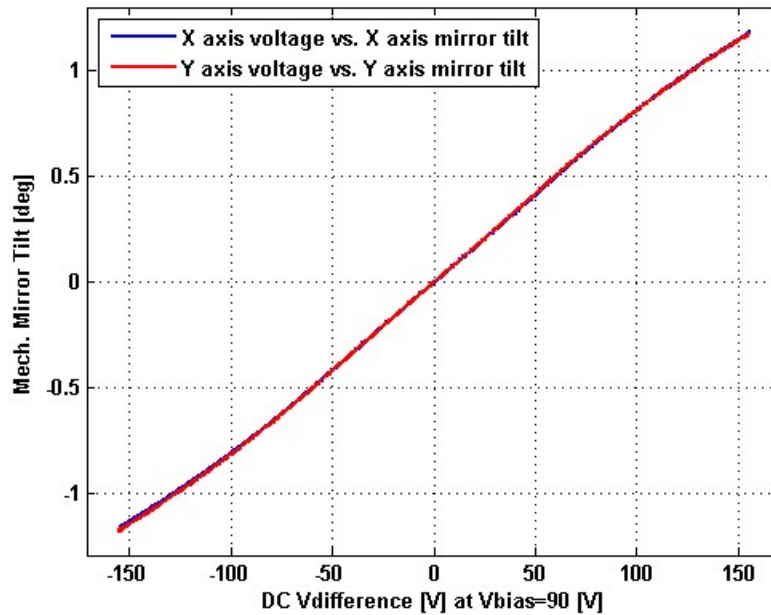
**Recommended LPF Cutoff Frequency (6th Order Bessel) [Hz] :** 900

**Date and Time Report was Created:** 14-May-2020 at 11:1:2

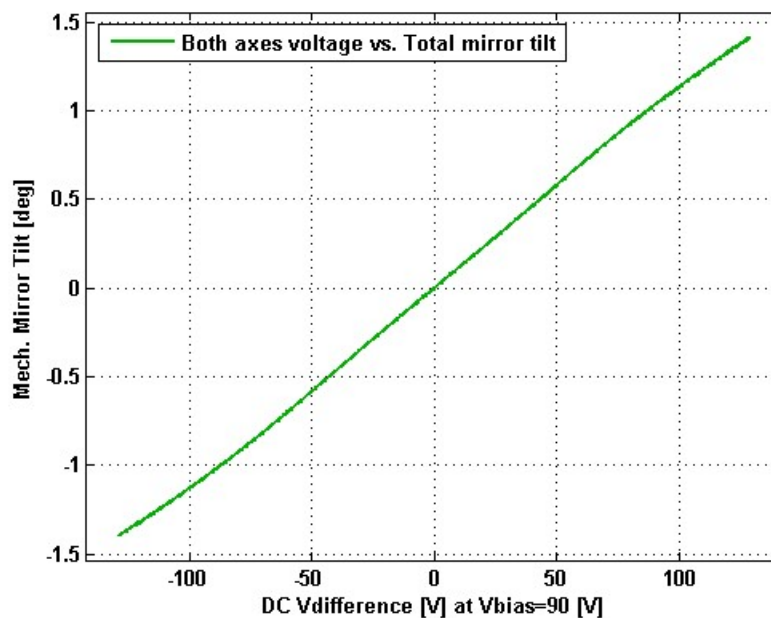
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# Static Response

## Voltage vs. Mech. Angle - Individual Axes



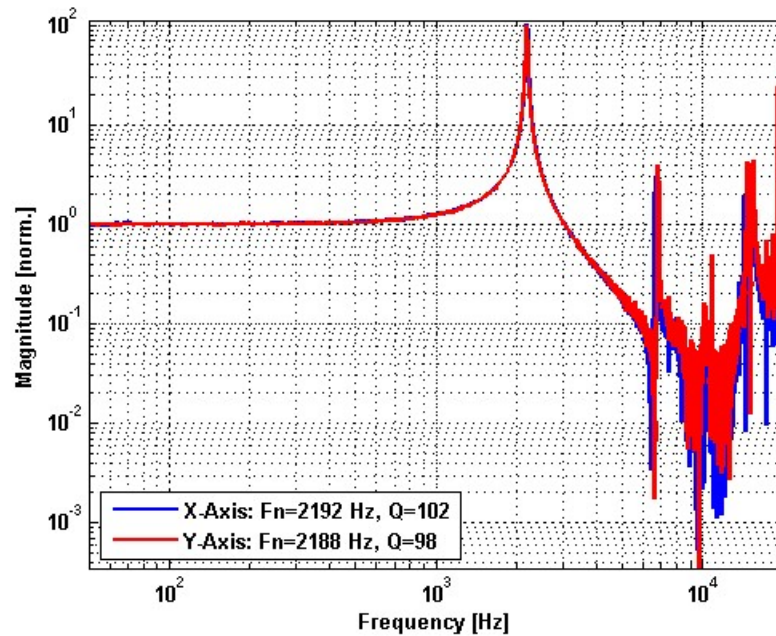
## Voltage vs. Mech. Angle - Coupled Axes



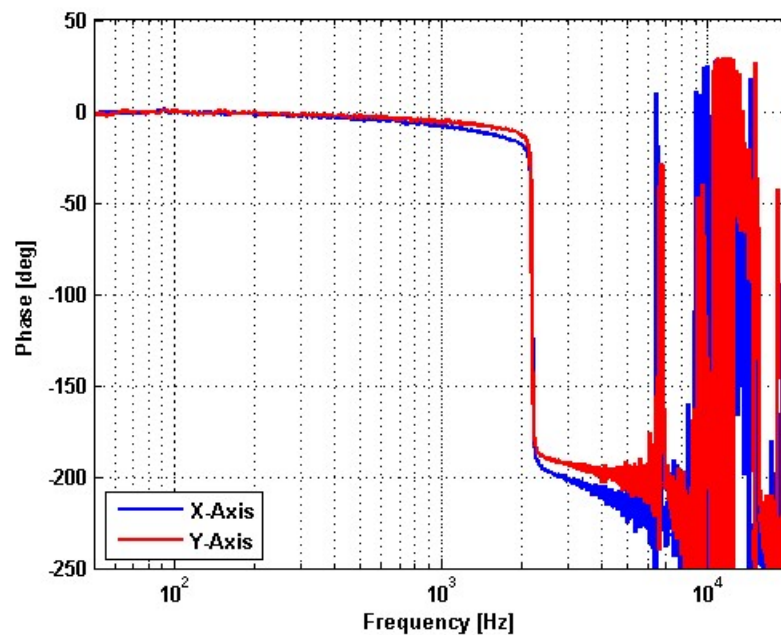
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# Frequency Response

## Small Signal Frequency Response - Magnitude



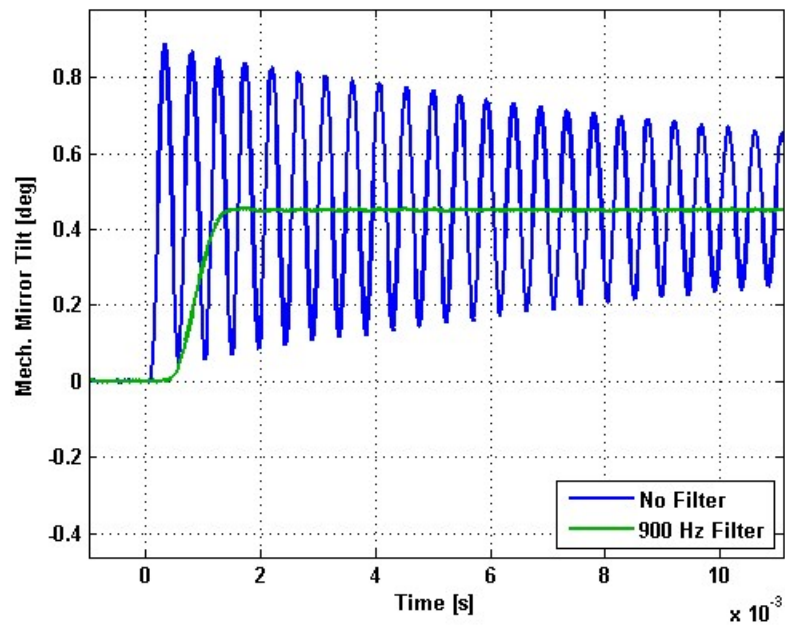
## Small Signal Frequency Response - Phase



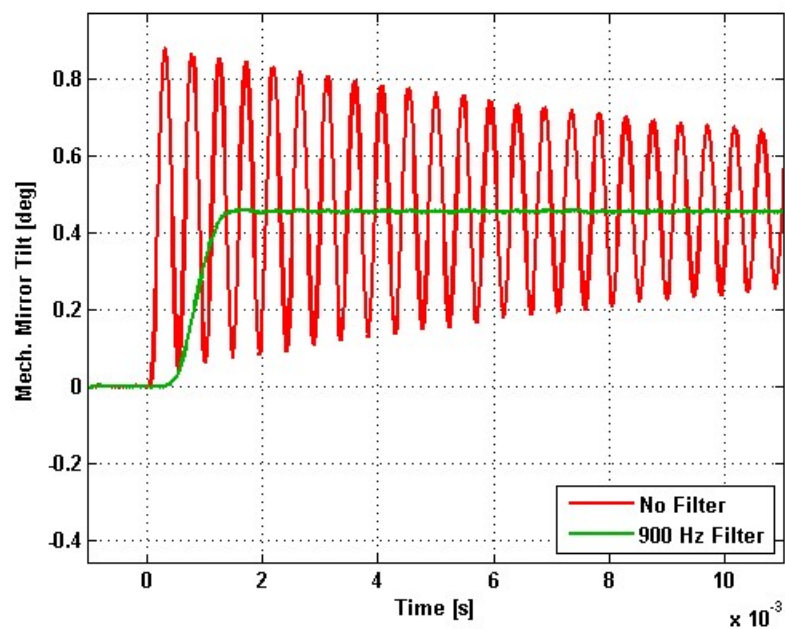
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# Step Response

## X-Axis Step Response



## Y-Axis Step Response

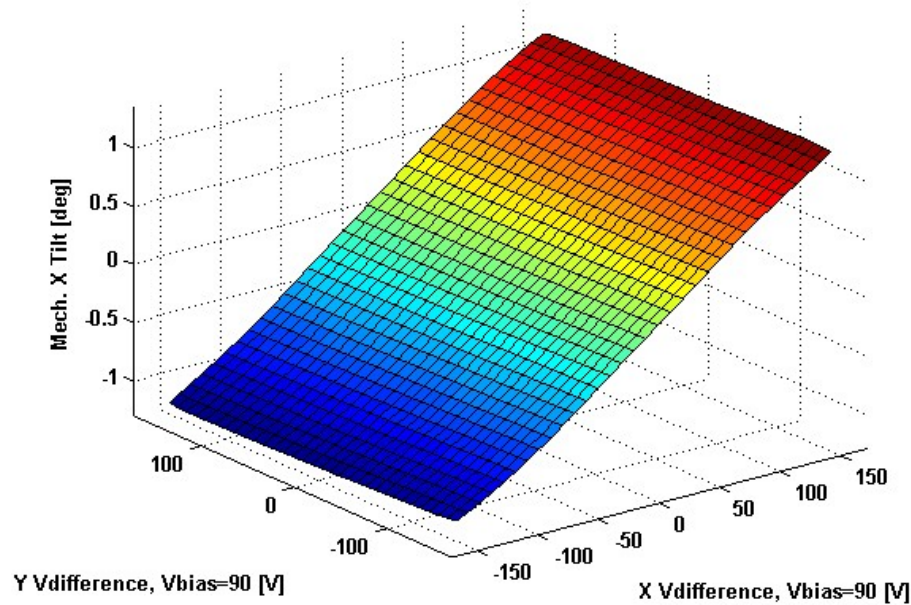




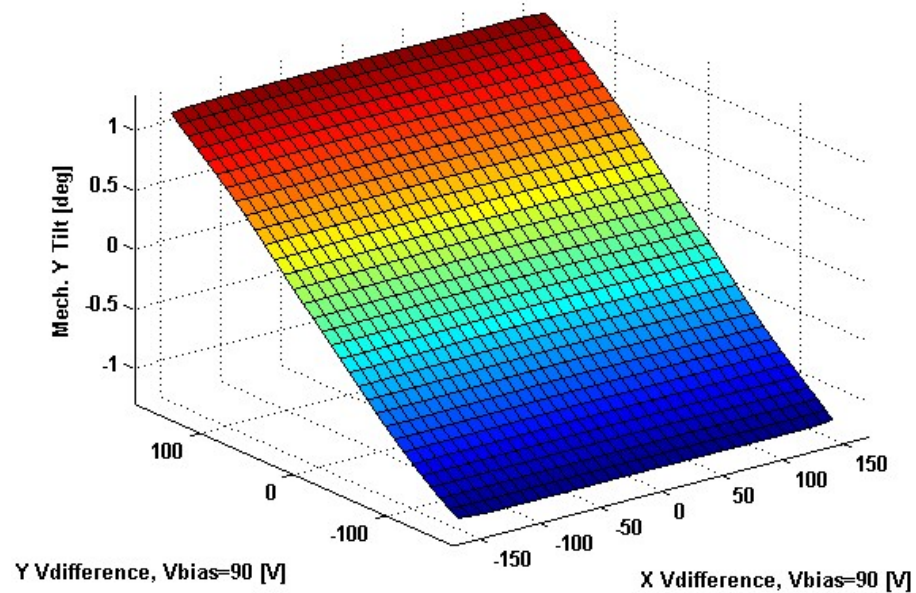
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## 2D Lookup Tables

### Voltage vs. X Mech. Angle - Lookup Table



### Voltage vs. Y Mech. Angle - Lookup Table



## Y vs. X Tilt - Addressable Mech. Angles

