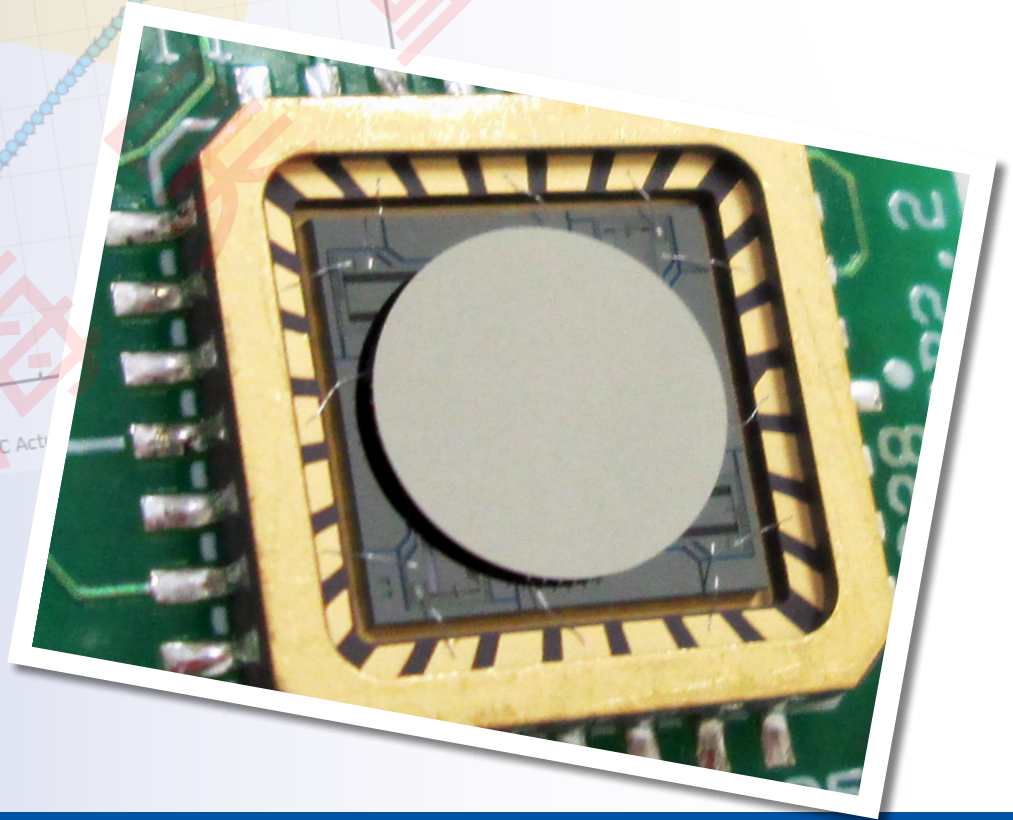
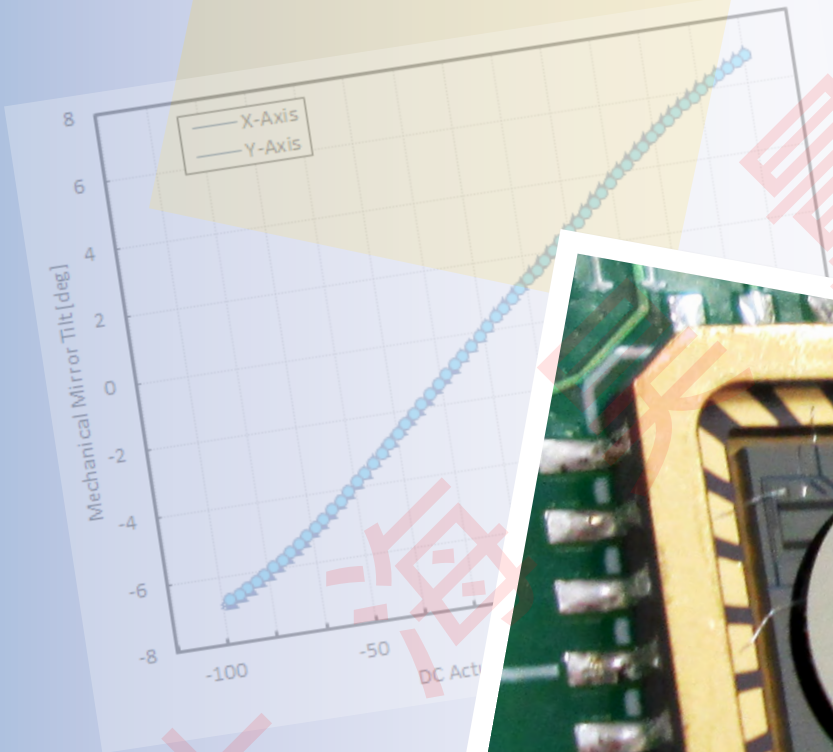


# Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet  
S5913



---

# Device Parameters Summary

**Device ID :** S5913

**Actuator Name :** A5L2.1

**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] :** 1.0736

**Maximum Angle - Y Axis [degrees] :** 1.0576

**Maximum Voltage - X Axis [V] :** 159

**Maximum Voltage - Y Axis [V] :** 159

**Bias Voltage [V] :** 80

**Maximum Angle - Coupled Axes [degrees] :** 1.2483

**Resonant Frequency - X Axis [Hz] :** 4141

**Resonant Frequency - Y Axis [Hz] :** 4141

**Quality Factor- X Axis :** 73

**Quality Factor - Y Axis :** 70

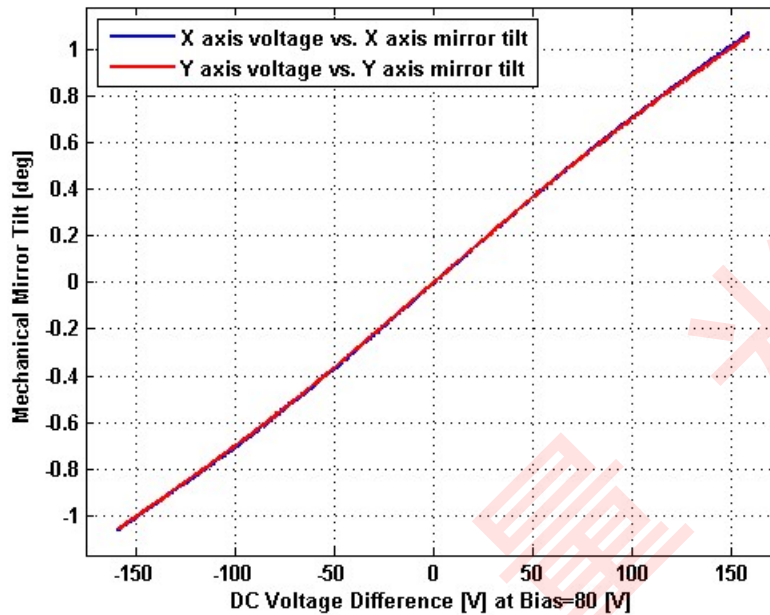
**Recommended LPF Cutoff Frequency (6th Order Bessel) :** 2000

**Date and Time Report was Created:** 23-Sep-2016 at 10:55:38

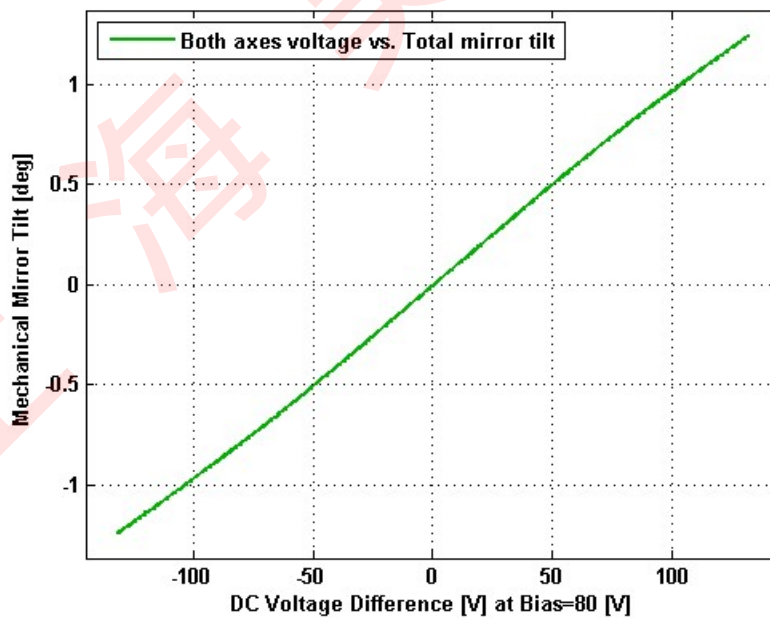
---

# Static Response

## Voltage vs. Angle - Individual Axes

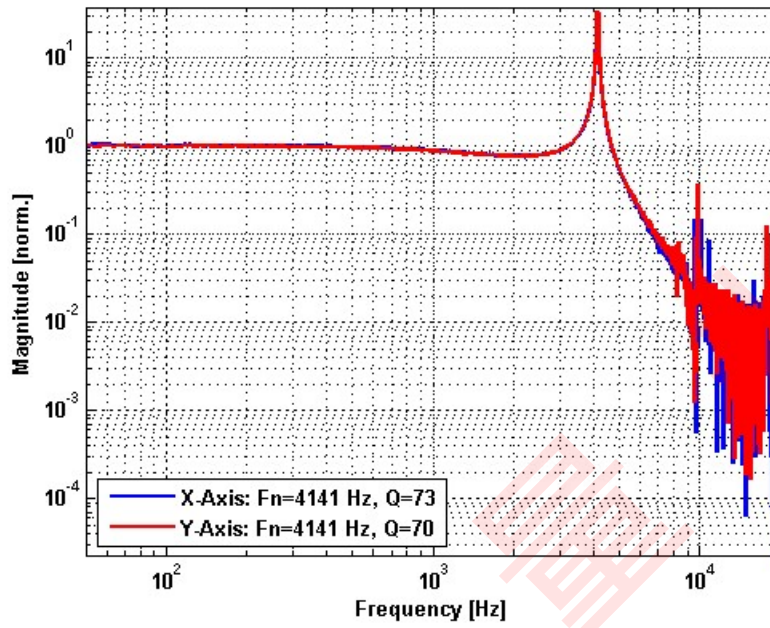


## Voltage vs. Angle - Coupled Axes

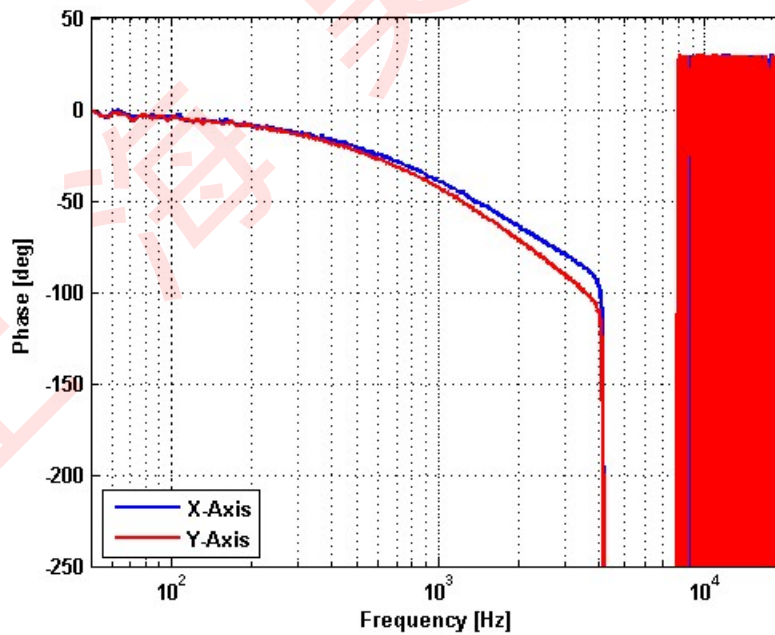


# Frequency Response

## Small Signal Frequency Response - Magnitude

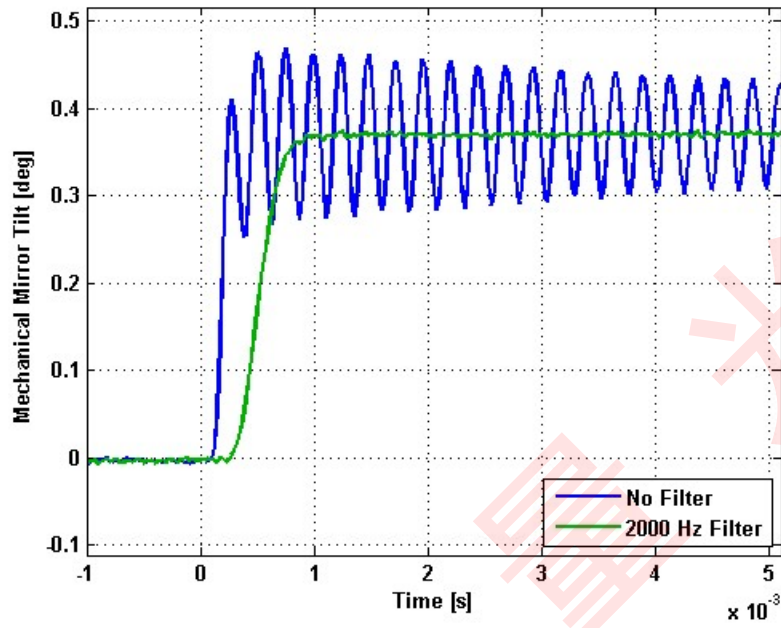


## Small Signal Frequency Response - Phase

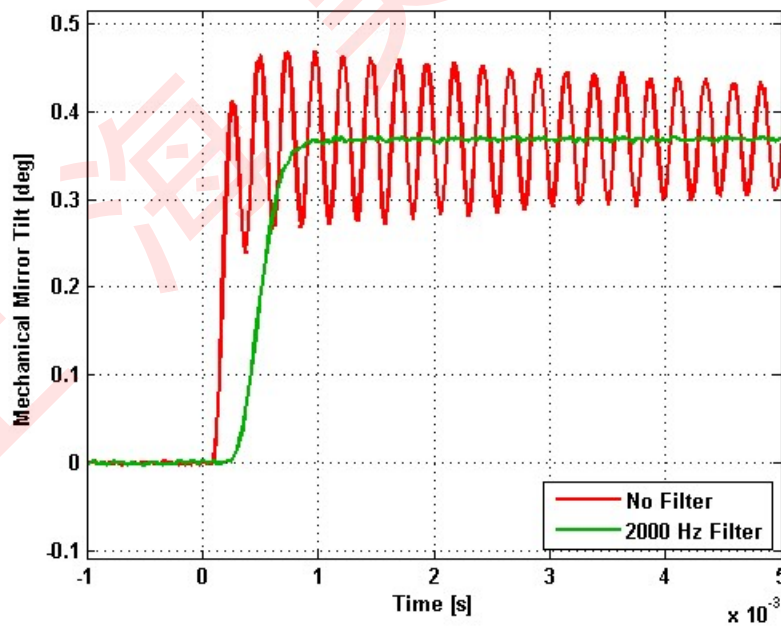


# Step Response

## X-Axis Step Response



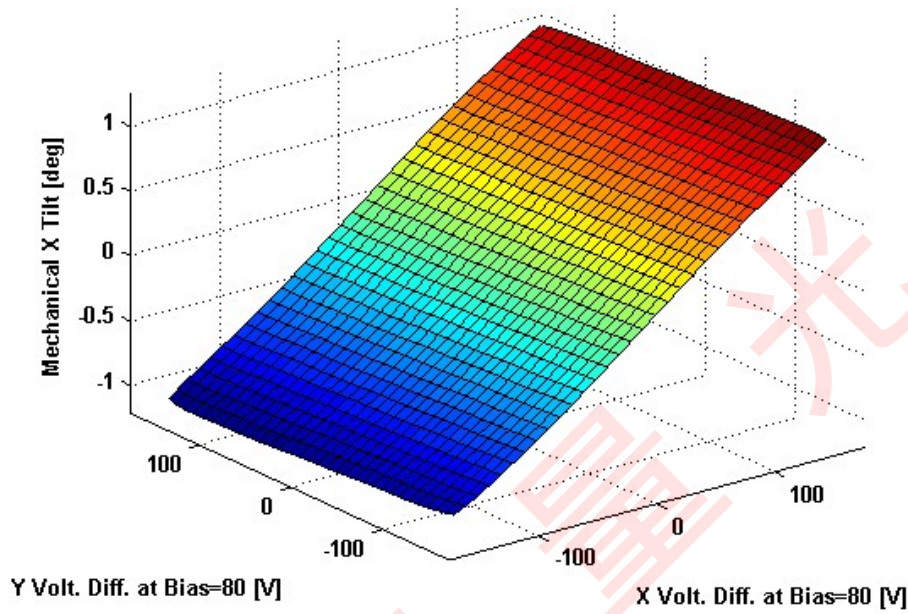
## Y-Axis Step Response



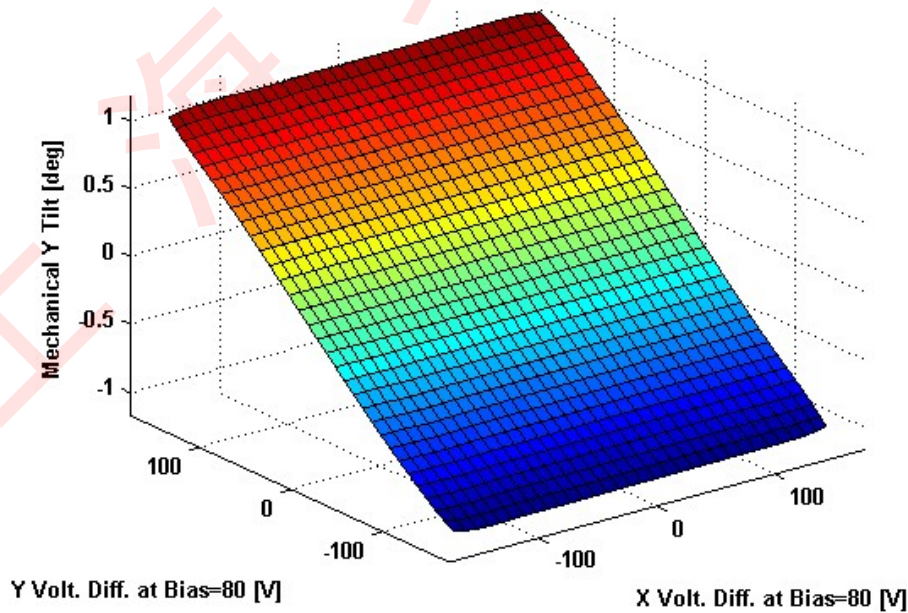
---

# 2D Lookup Tables

## Voltage vs. X Angle - Lookup Table



## Voltage vs. Y Angle - Lookup Table



# Y Angle vs. X Angle - Addressable Angles

