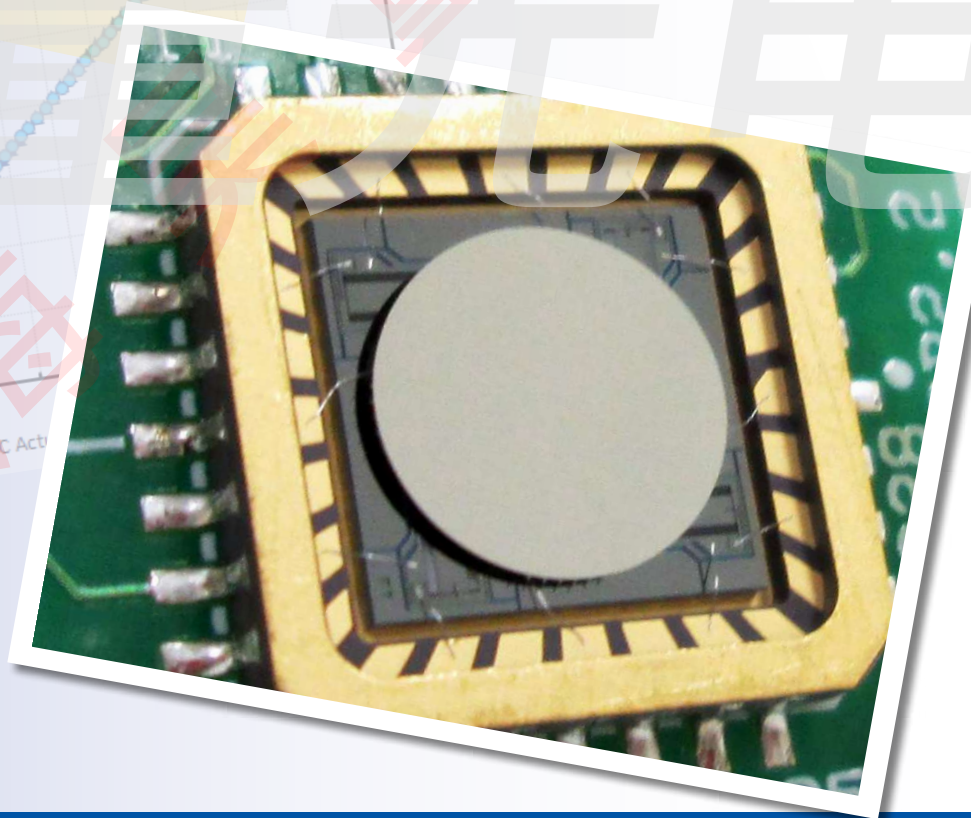
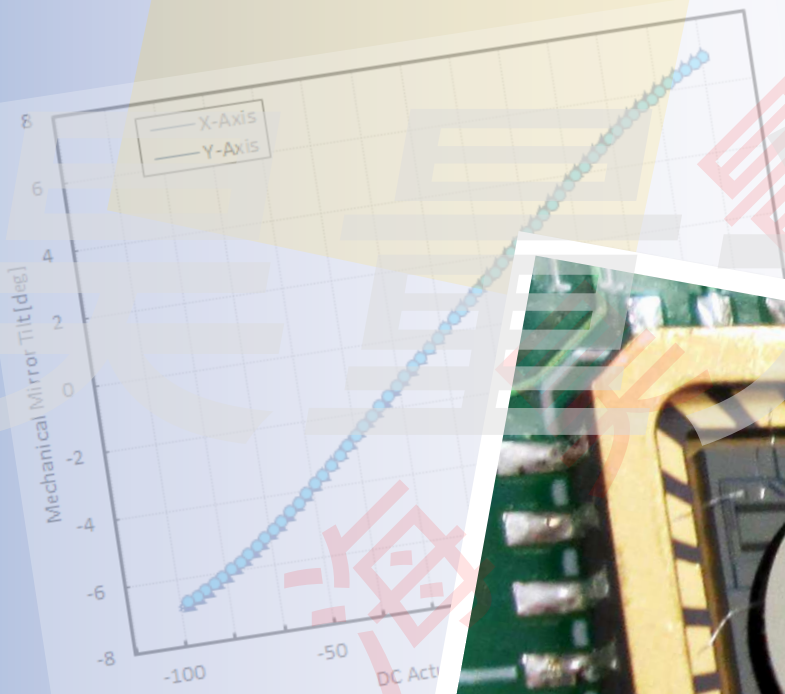


# Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet  
S5295



[www.auniontech.com](http://www.auniontech.com)

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# Device Parameters Summary

**Device ID :** S5295

**Actuator Name :** A7B2.1

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

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

**Mirror Coating :** Aluminum

**Maximum Angle - X Axis [degrees] :** 5.7460

**Maximum Angle - Y Axis [degrees] :** 5.6746

**Maximum Voltage - X Axis [V] :** 157

**Maximum Voltage - Y Axis [V] :** 157

**Bias Voltage [V] :** 80

**Maximum Angle - Coupled Axes [degrees] :** 7.4683

**Resonant Frequency - X Axis [Hz] :** 444

**Resonant Frequency - Y Axis [Hz] :** 442

**Quality Factor- X Axis :** 24

**Quality Factor - Y Axis :** 22

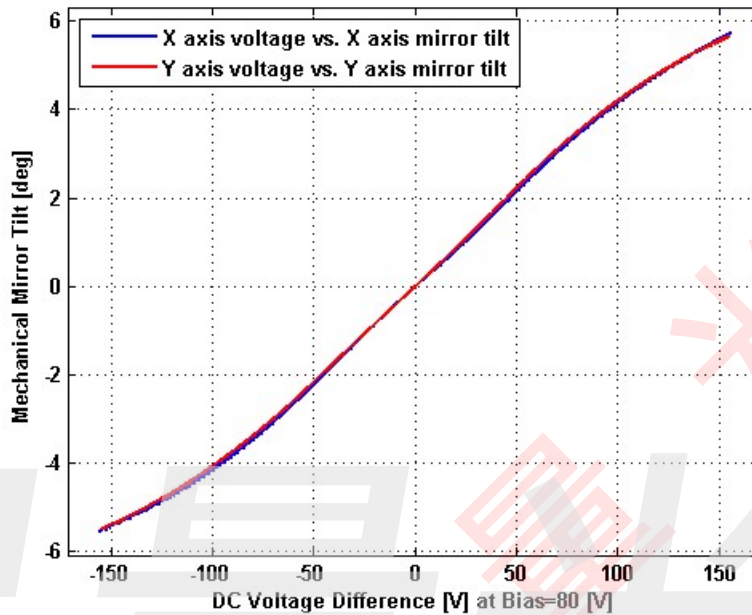
**Recommended LPF Cutoff Frequency (6th Order Bessel) :** 200

**Date and Time Report was Created:** 28-Mar-2016 at 16:21:17

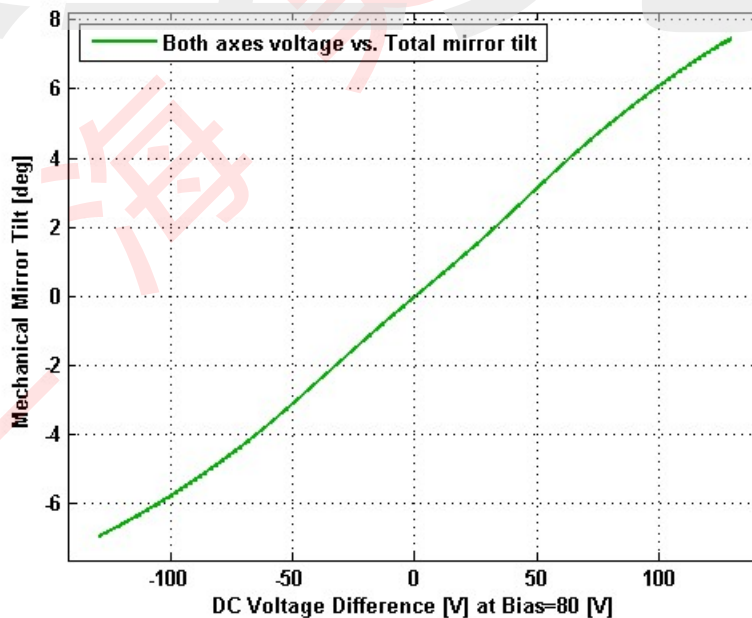
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# Static Response

## Voltage vs. Angle - Individual Axes

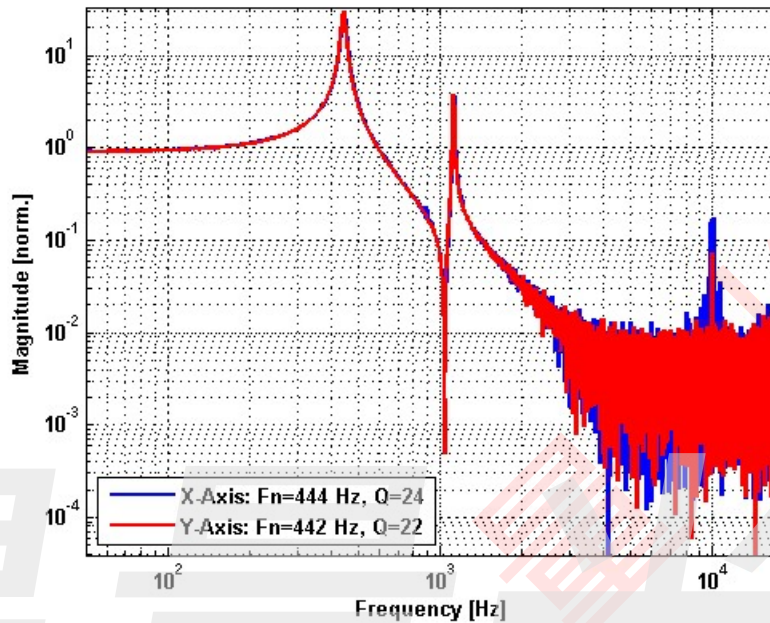


## Voltage vs. Angle - Coupled Axes

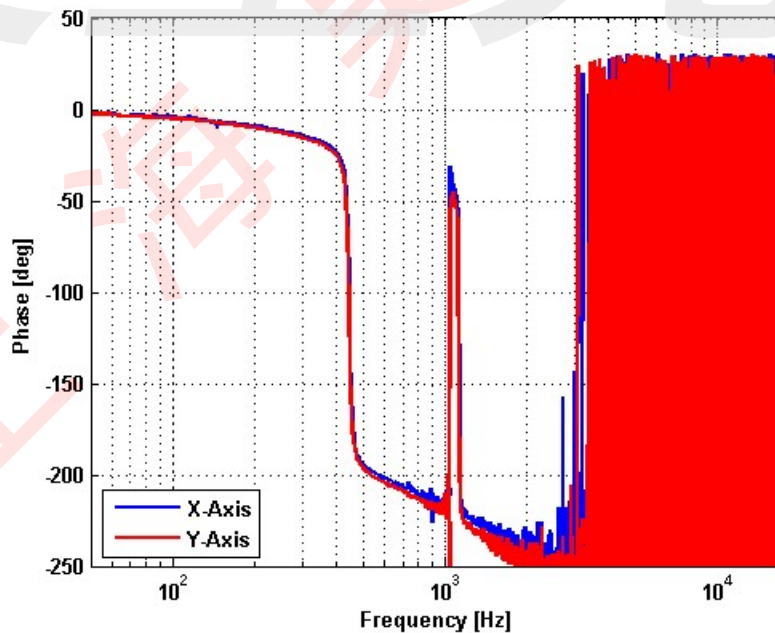


# Frequency Response

## Small Signal Frequency Response - Magnitude

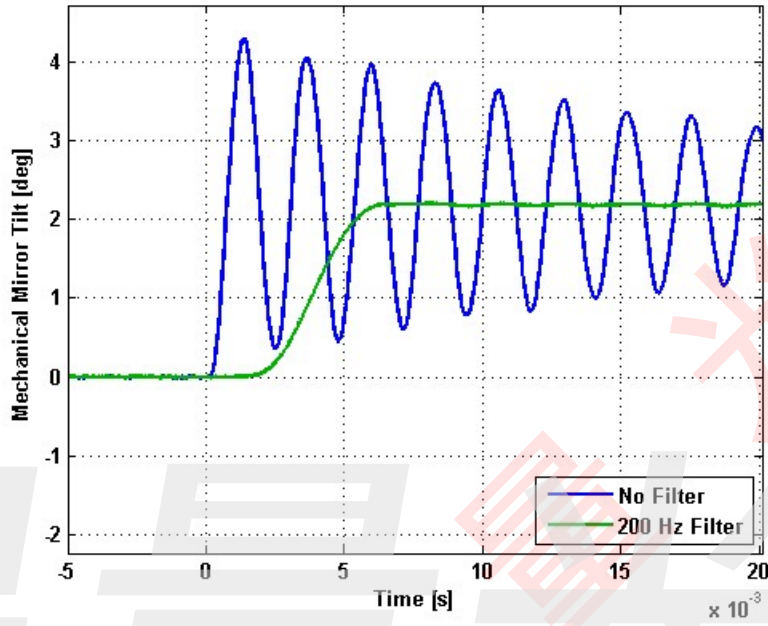


## Small Signal Frequency Response - Phase

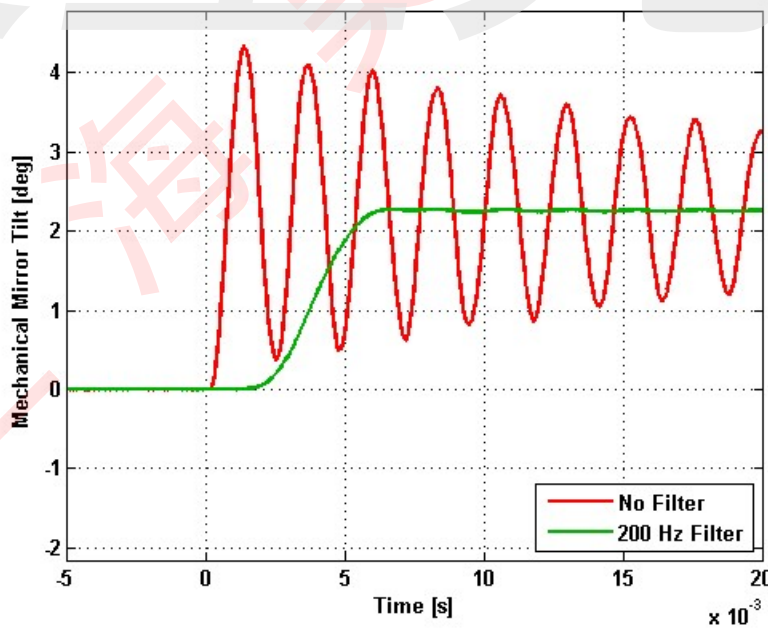


# Step Response

## X-Axis Step Response



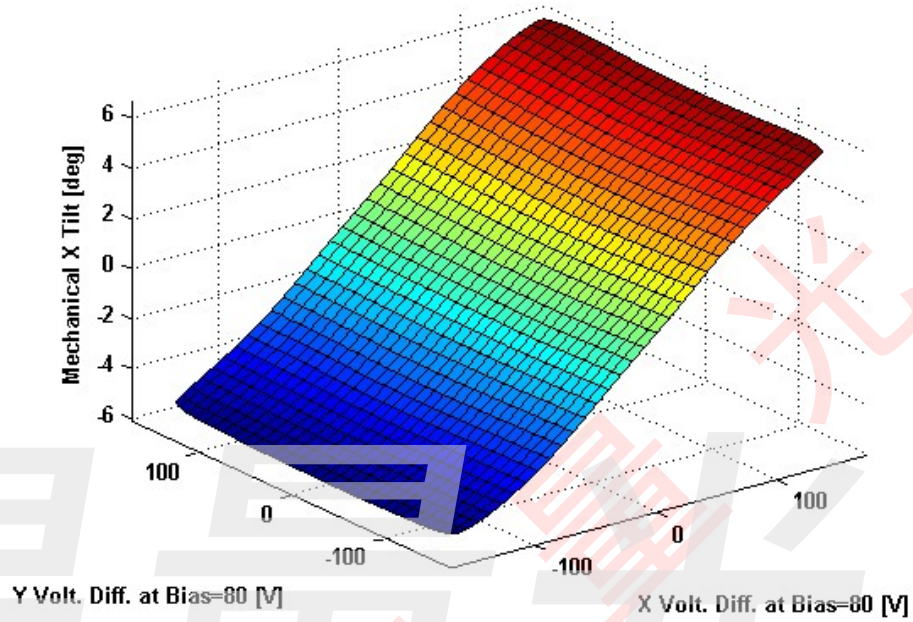
## Y-Axis Step Response



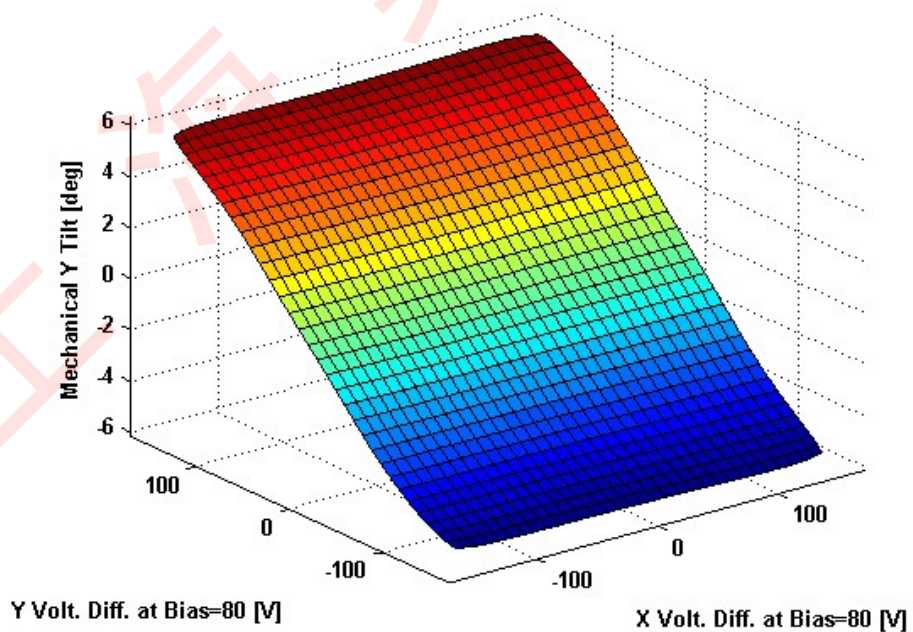
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# 2D Lookup Tables

## Voltage vs. X Angle - Lookup Table



## Voltage vs. Y Angle - Lookup Table



## Y Angle vs. X Angle - Addressable Angles

