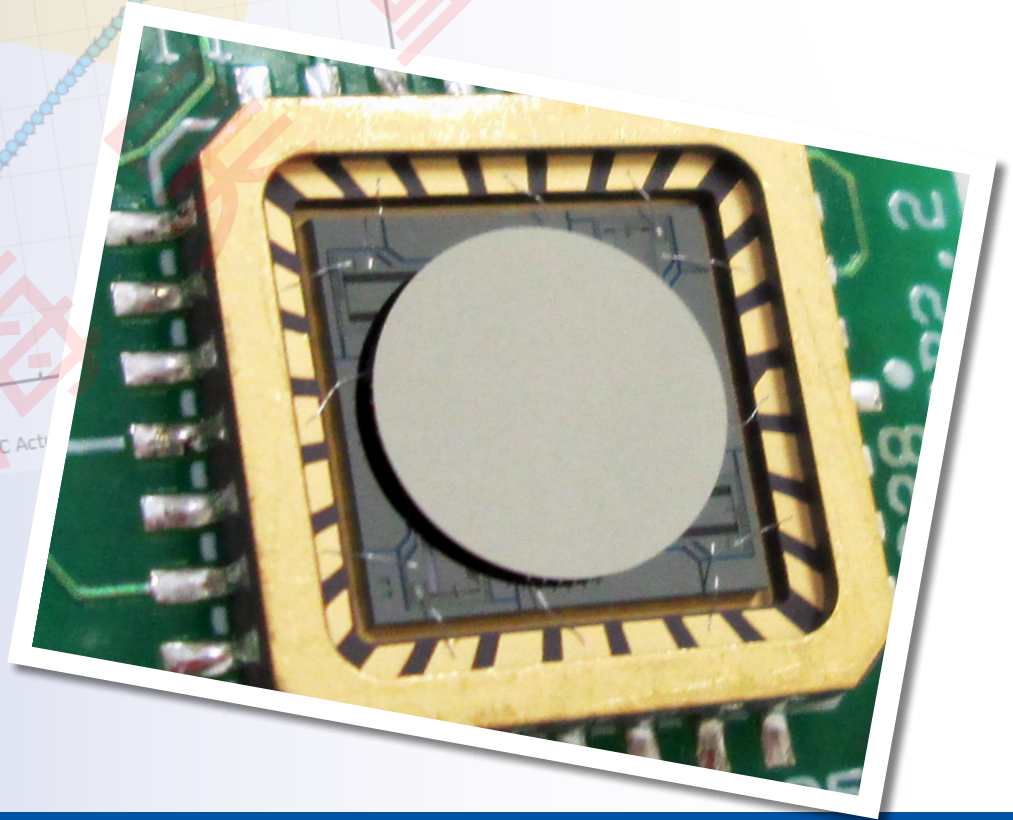
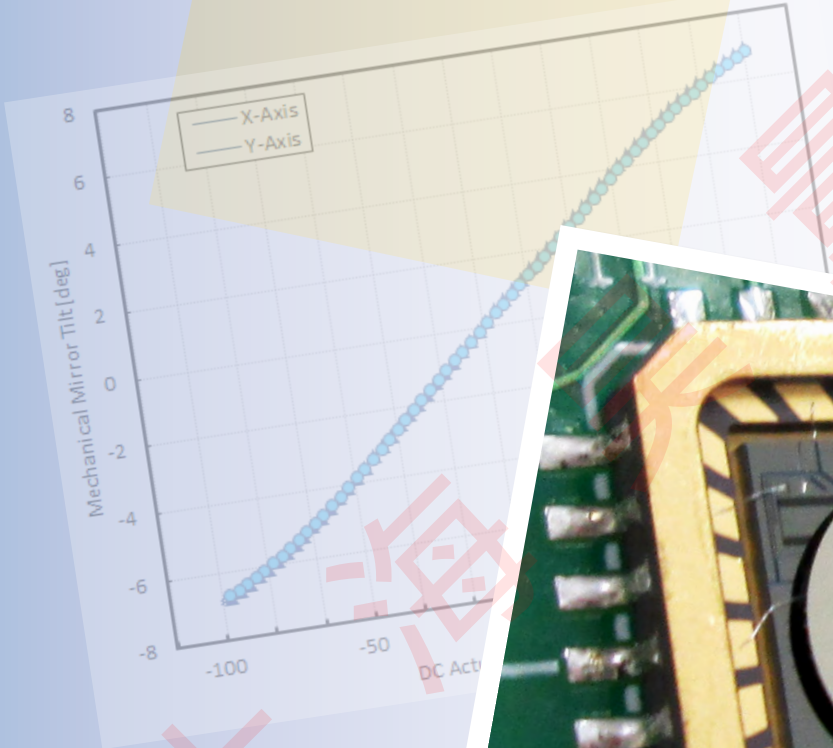


# Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet  
S45266



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# Device Parameters Summary

**Device ID** : S45266

**Actuator Type**: A7M10.2

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

**Mirror Type and Size** : Integrated mirror of 1000um diameter

**Mirror Coating** : Aluminum

**Maximum Mech. Angle - X Axis [degrees]** : 5.1930

**Maximum Mech. Angle - Y Axis [degrees]** : 5.1309

**Maximum Vdifference - X Axis [V]** : 180

**Maximum Vdifference - Y Axis [V]** : 180

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

**Maximum Mech. Angle - Coupled Axes [degrees]** : 7.6146

**Resonant Frequency - X Axis [Hz]** : 4473

**Resonant Frequency - Y Axis [Hz]** : 4458

**Quality Factor - X Axis** : 86

**Quality Factor - Y Axis** : 89

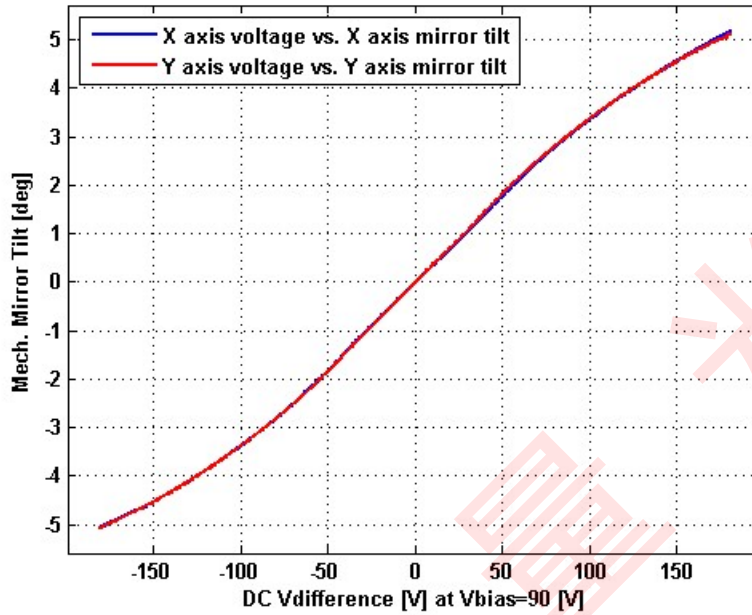
**Recommended LPF Cutoff Frequency (6th Order Bessel) [Hz]** : 2200

**Date and Time Report was Created:** 17-Jul-2019 at 16:47:34

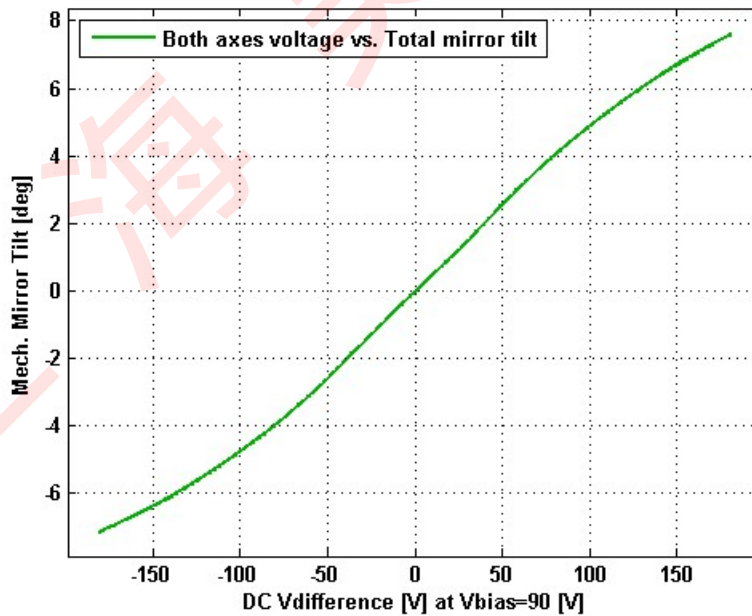
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# Static Response

## Voltage vs. Mech. Angle - Individual Axes

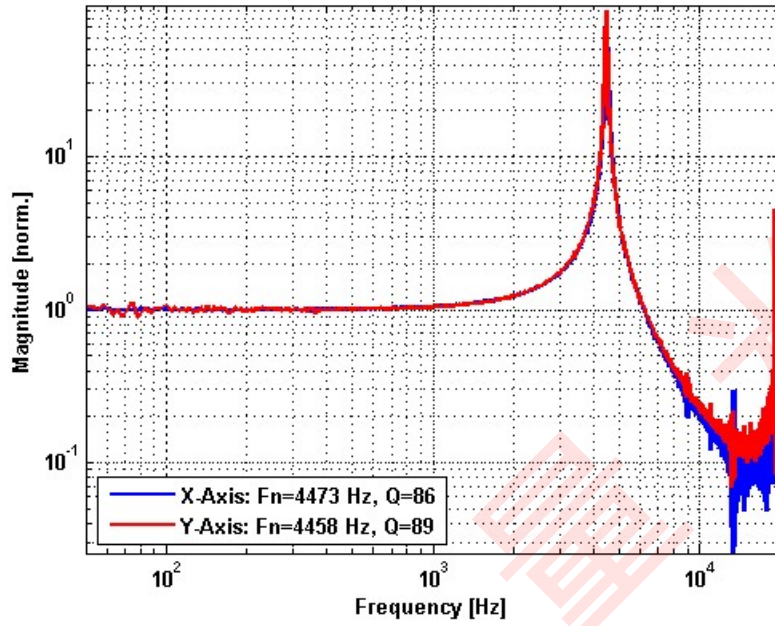


## Voltage vs. Mech. Angle - Coupled Axes

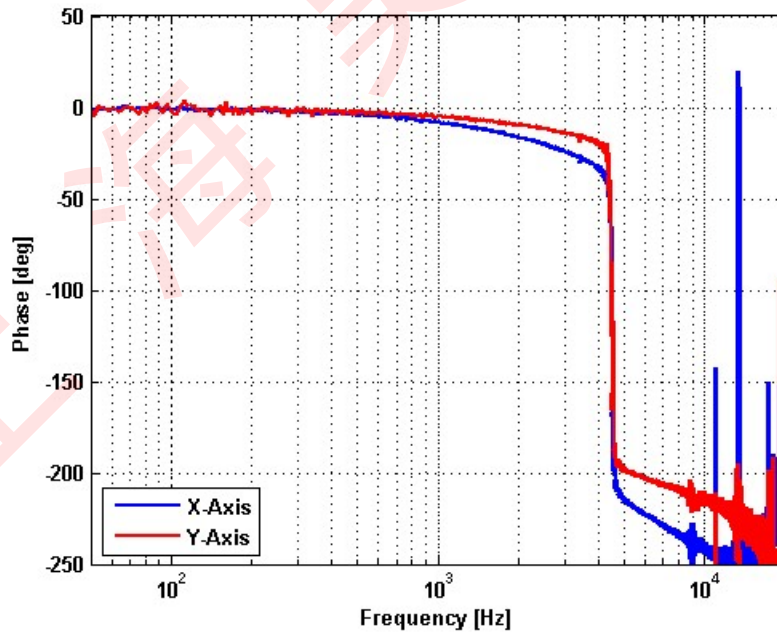


# Frequency Response

## Small Signal Frequency Response - Magnitude



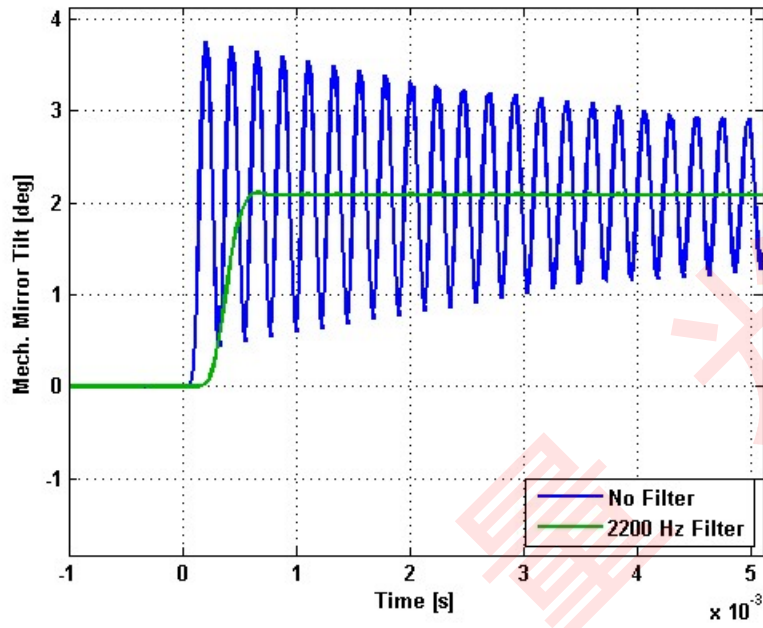
## Small Signal Frequency Response - Phase



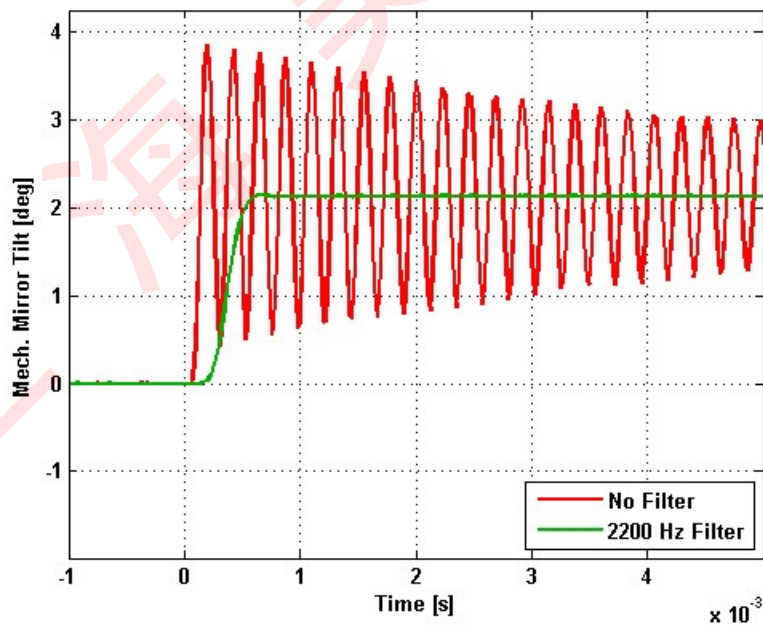
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# Step Response

## X-Axis Step Response



## Y-Axis Step Response

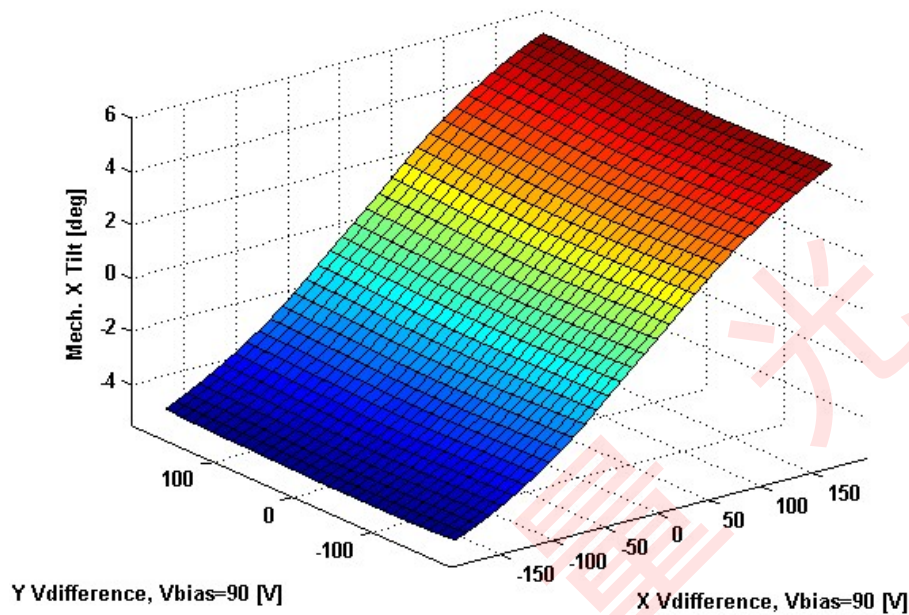




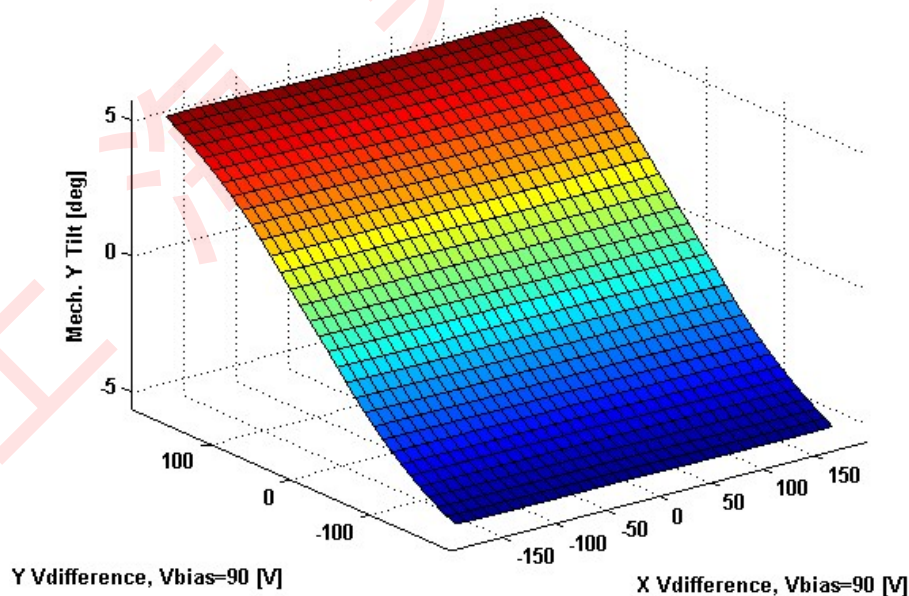
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# 2D Lookup Tables

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



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



# Y vs. X Tilt - Addressable Mech. Angles

