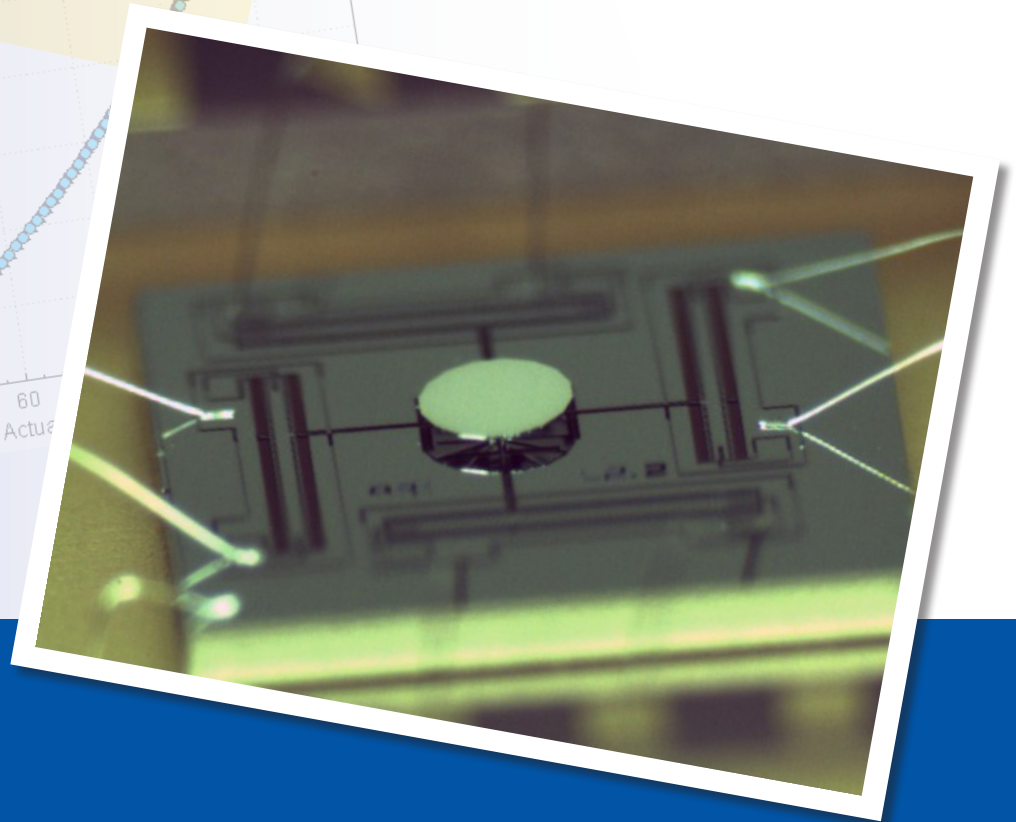
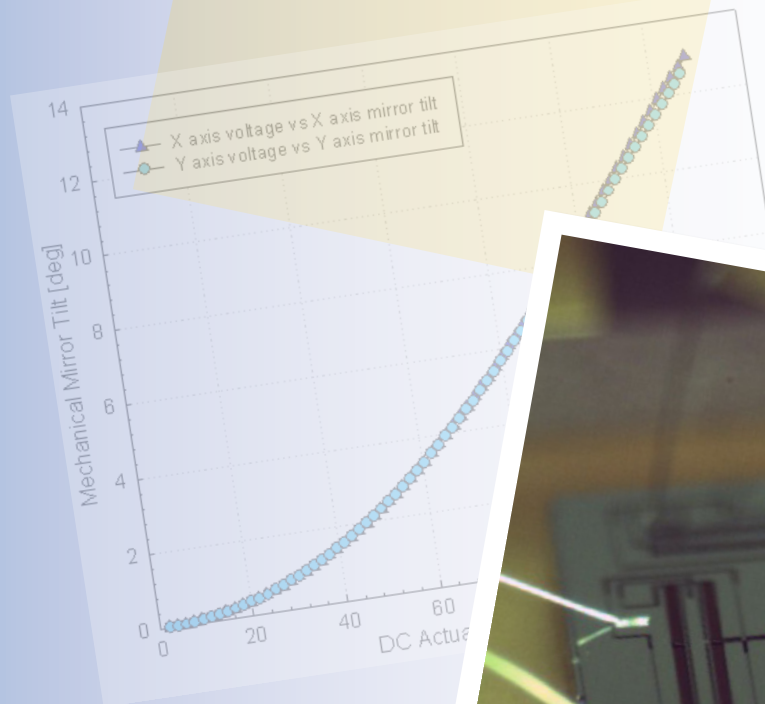


## Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheets  
S1425



---

# Device Parameters Summary

**Device ID** : S1425DB

**Actuator Type** : 13Z1.1

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

**Mirror Coating** : Al-coated

**Maximum Angle - X Axis [degrees]** : 5.4295

**Maximum Angle - Y Axis [degrees]** : 5.3358

**Maximum Voltage - X Axis [V]** : 122

**Maximum Voltage - Y Axis [V]** : 122

**Maximum Angle - Coupled Axes [degrees]** : 6.9804

**Resonant Frequency - X Axis [Hz]** : 332

**Resonant Frequency - Y Axis [Hz]** : 332

**Quality Factor- X Axis** : 14

**Quality Factor - Y Axis** : 11

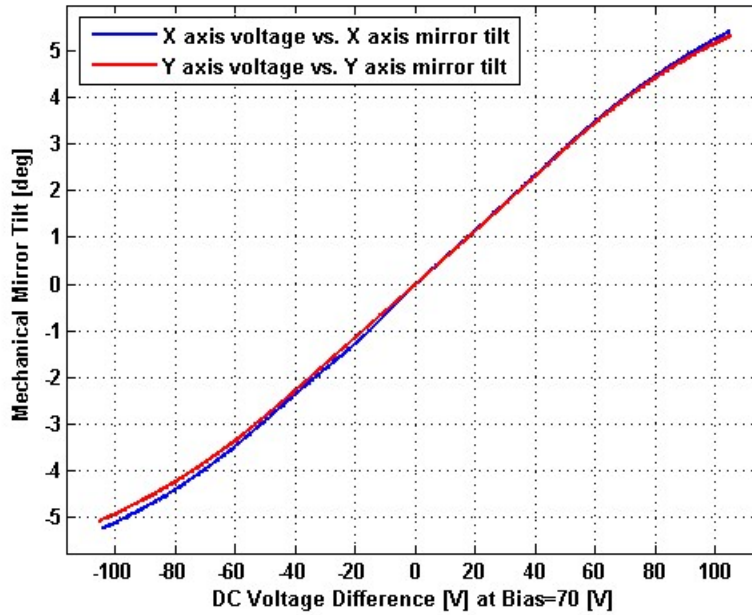
**Recommended LPF Cutoff Frequency (6th Order Bessel)** : 140

Created 7:13 pm 27 September 2011

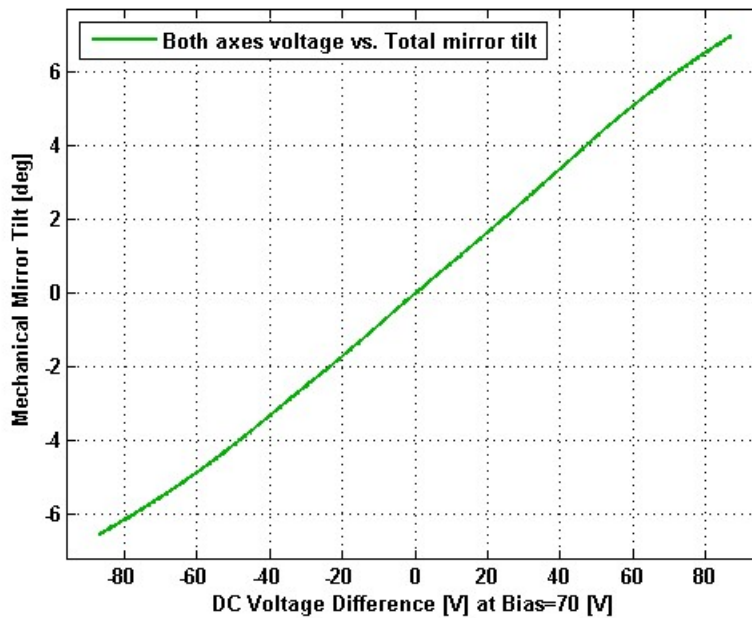
---

# Static Response

## Voltage vs. Angle - Individual Axes

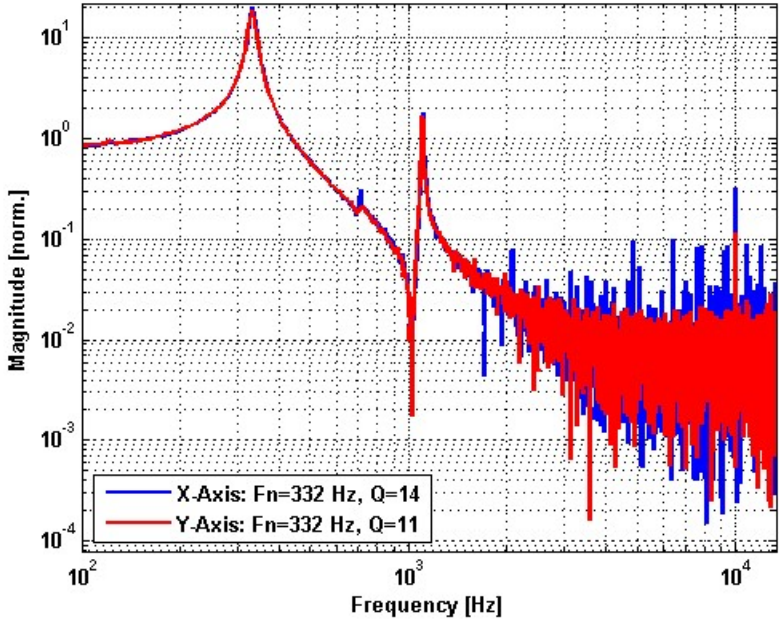


## Voltage vs. Angle - Coupled Axes

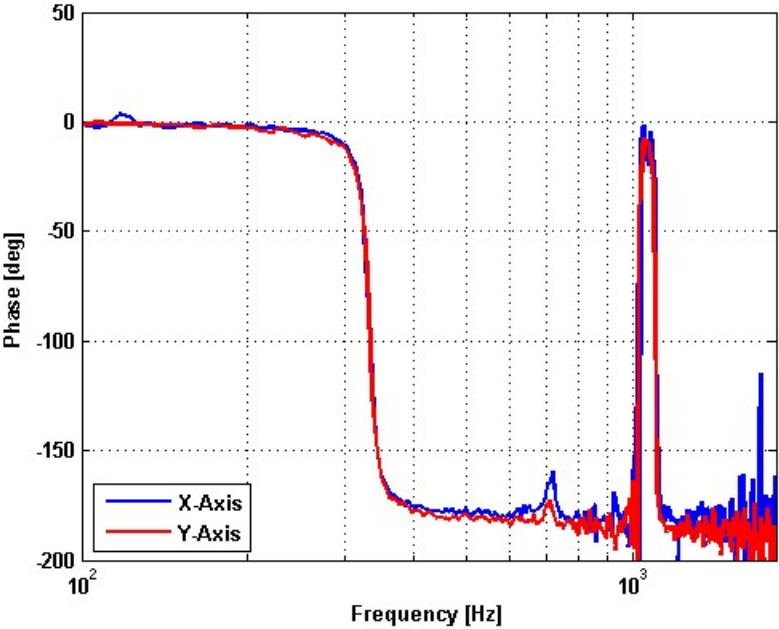


# Frequency Response

## Small Signal Frequency Response - Magnitude



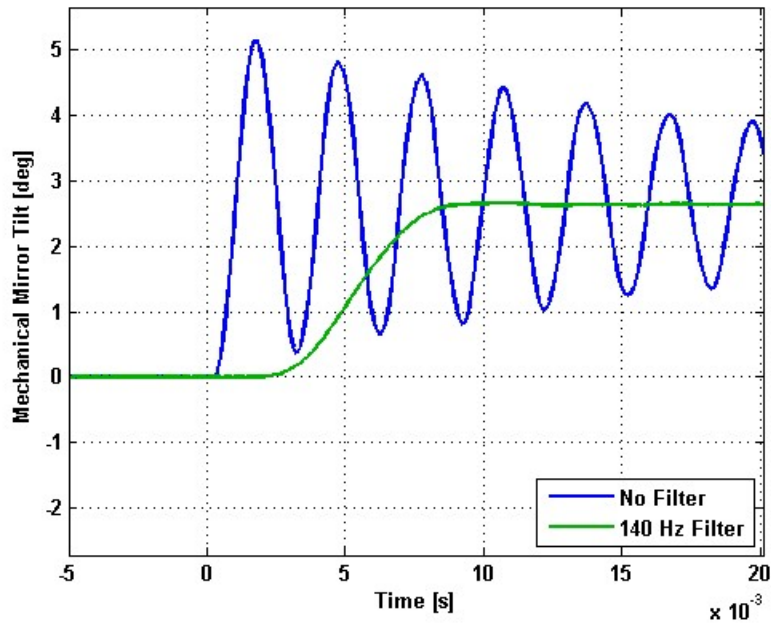
## Small Signal Frequency Response - Phase



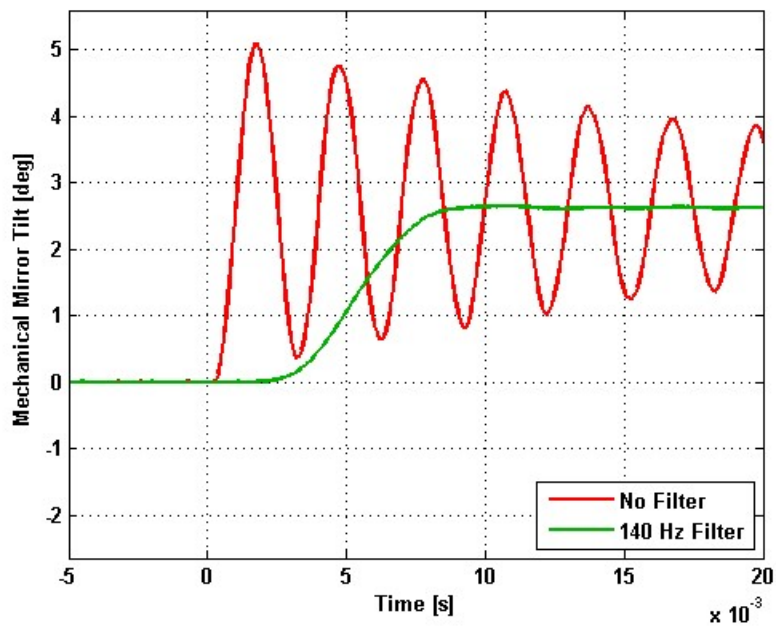
---

# Step Response

## X-Axis Step Response



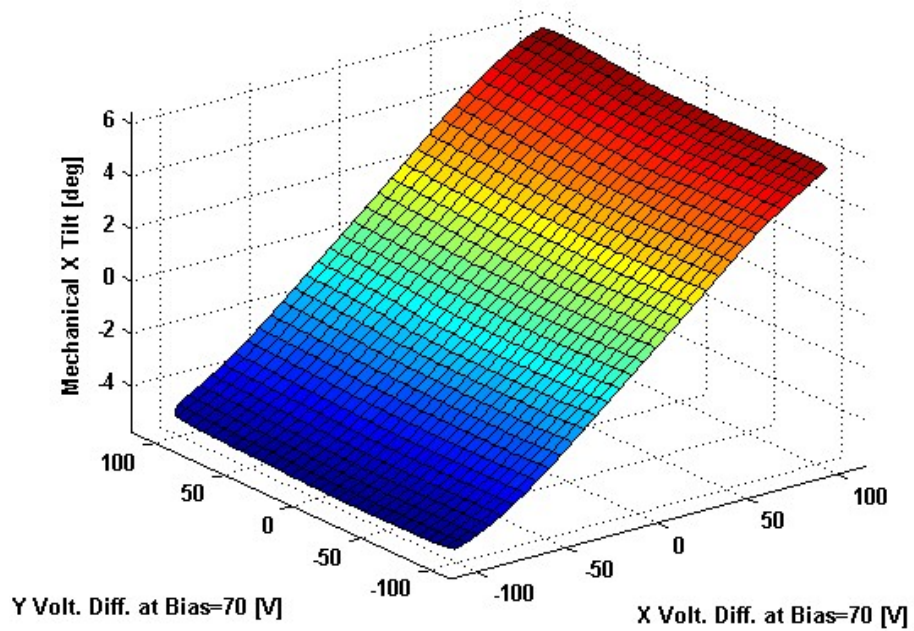
## Y-Axis Step Response



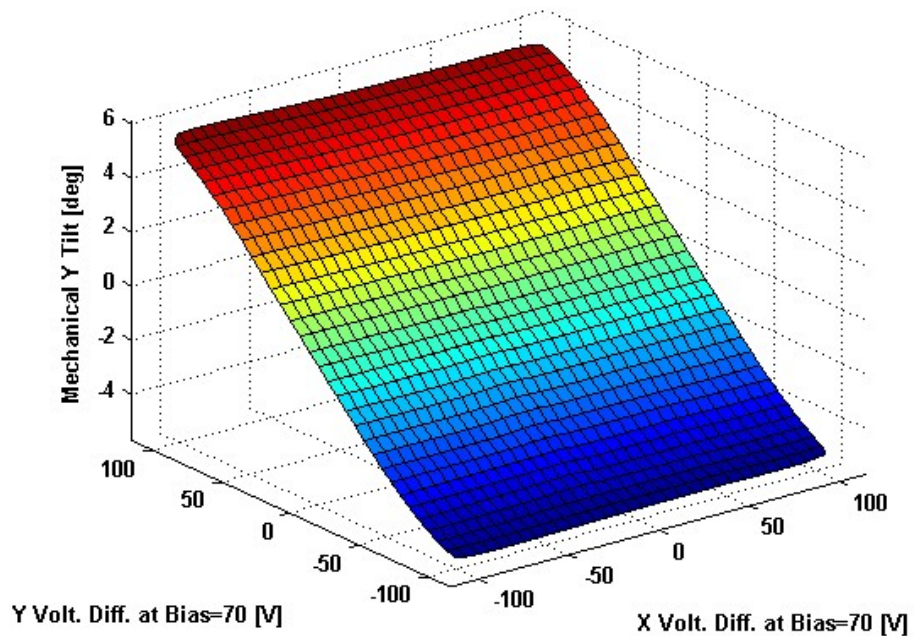
---

# 2D Lookup Tables

## Voltage vs. X Angle - Lookup Table



## Voltage vs. Y Angle - Lookup Table



# Y Angle vs. X Angle - Addressable Angles

