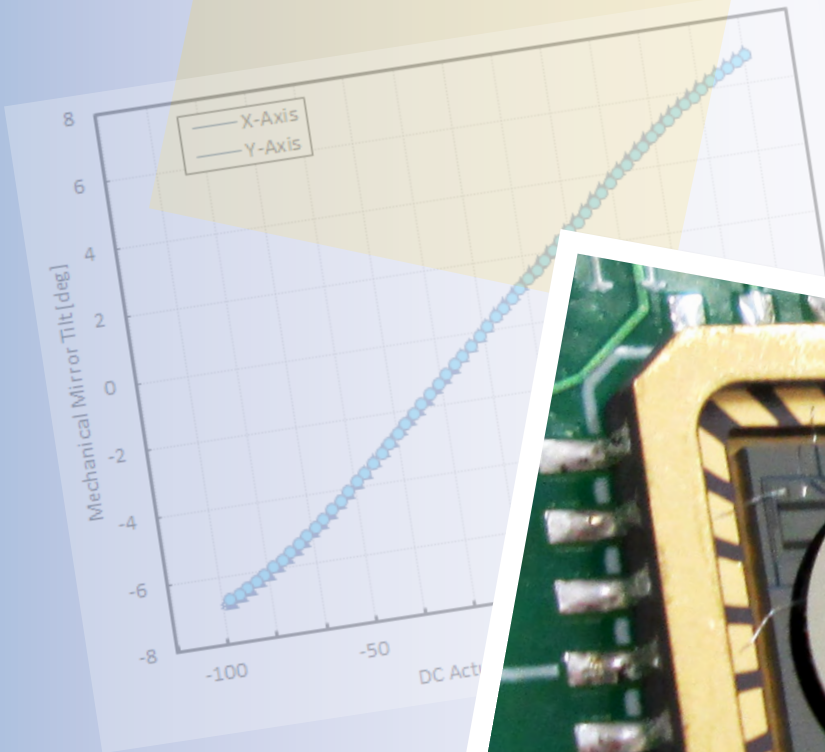




Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S41760



Device Parameters Summary

Device ID : S41760

Actuator Name: A8L2.2

Actuator Mode : Gimbal-less Dual-Axis Quasistatic

Mirror Type: Bonded

Mirror Size : 3.6mm diameter

Mirror Coating : Gold

Maximum Mech. Angle - X Axis [degrees] : 5.2738

Maximum Mech. Angle - Y Axis [degrees] : 5.2842

Maximum Vdifference - X Axis [V] : 172.3700

Maximum Vdifference - Y Axis [V] : 171.1400

Driver Bias Voltage (Vbias) [V] : 90

Maximum Mech. Angle - Coupled Axes [degrees] : 6.5912

Resonant Frequency - X Axis [Hz] : 553

Resonant Frequency - Y Axis [Hz] : 549

Quality Factor - X Axis : 48.5000

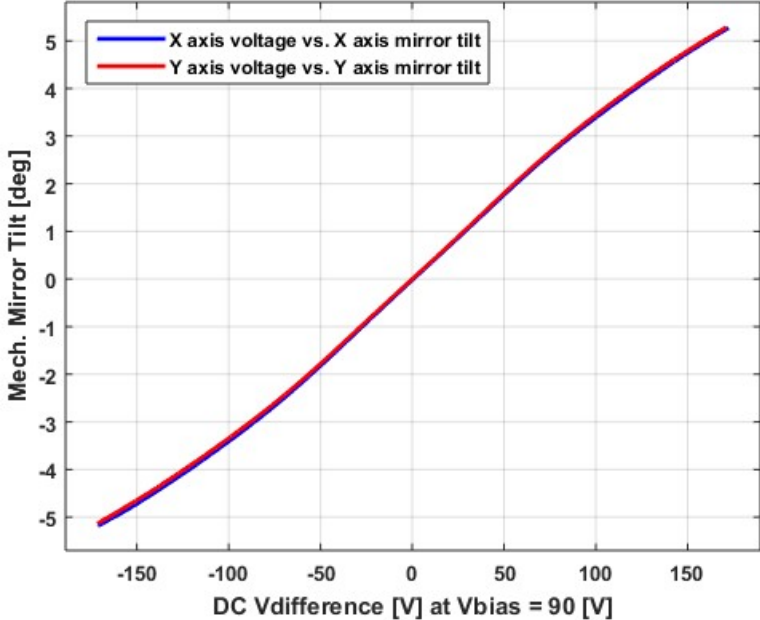
Quality Factor - Y Axis : 49.8000

Recommended LPF Cutoff Frequency (6th Order Bessel) [Hz] : 220

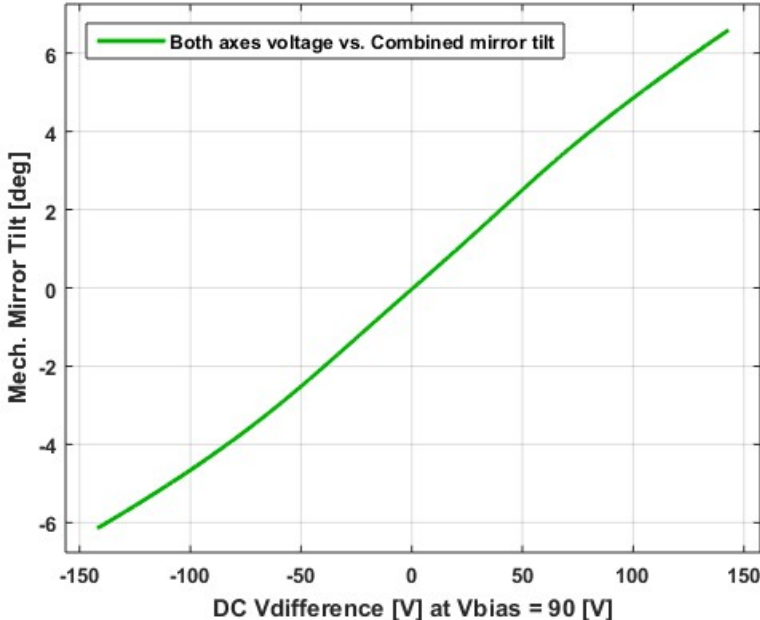
Date and Time Report was Created: 16-Apr-2018 at 16:9:16

Static Response

Voltage vs. Mech. Angle - Individual Axes

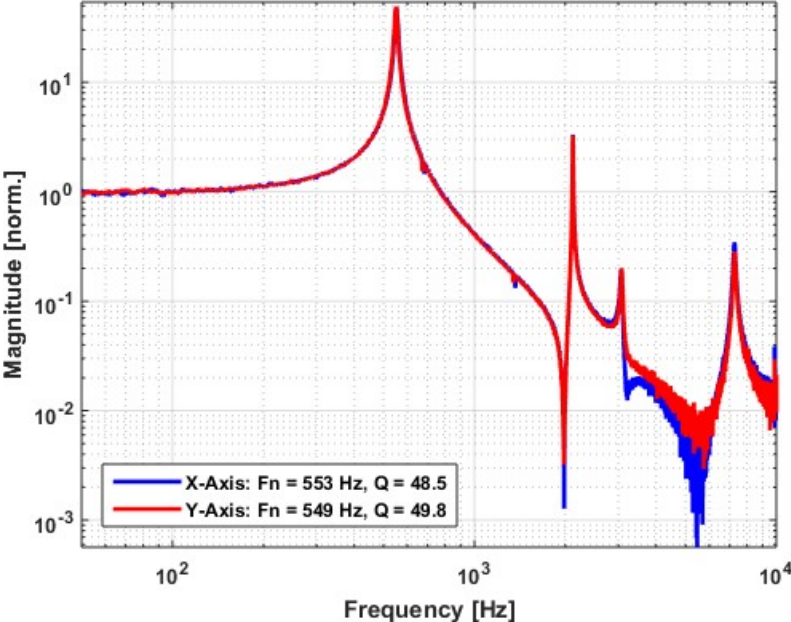


Voltage vs. Mech. Angle - Coupled Axes

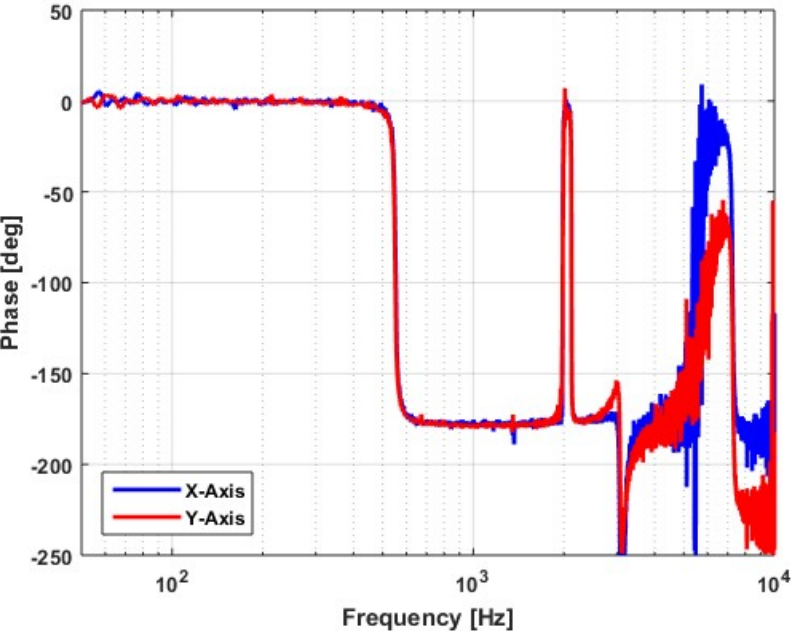


Frequency Response

Small Signal Frequency Response - Magnitude

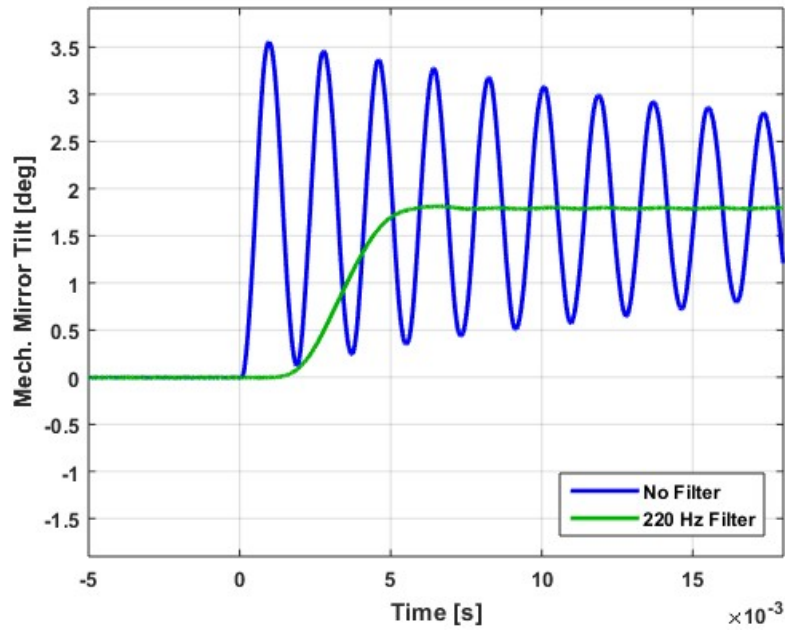


Small Signal Frequency Response - Phase

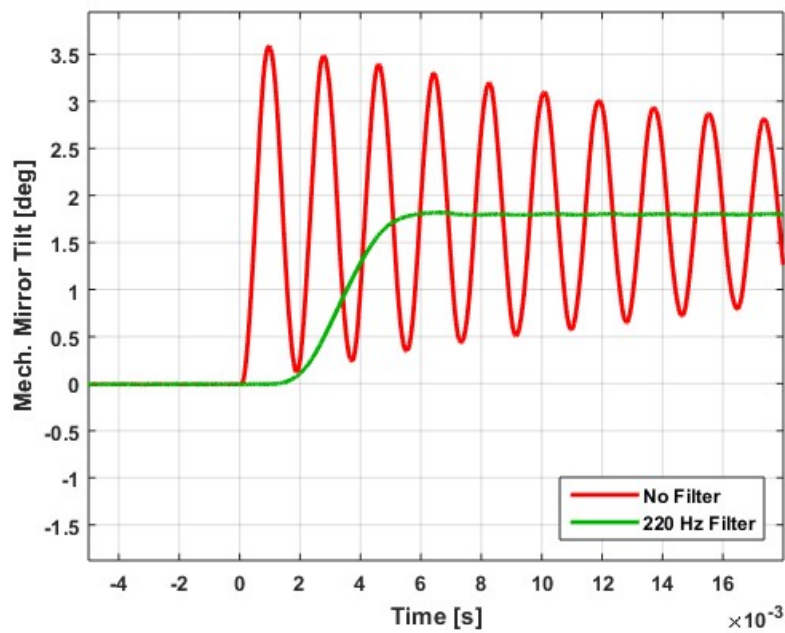


Step Response

X-Axis Step Response

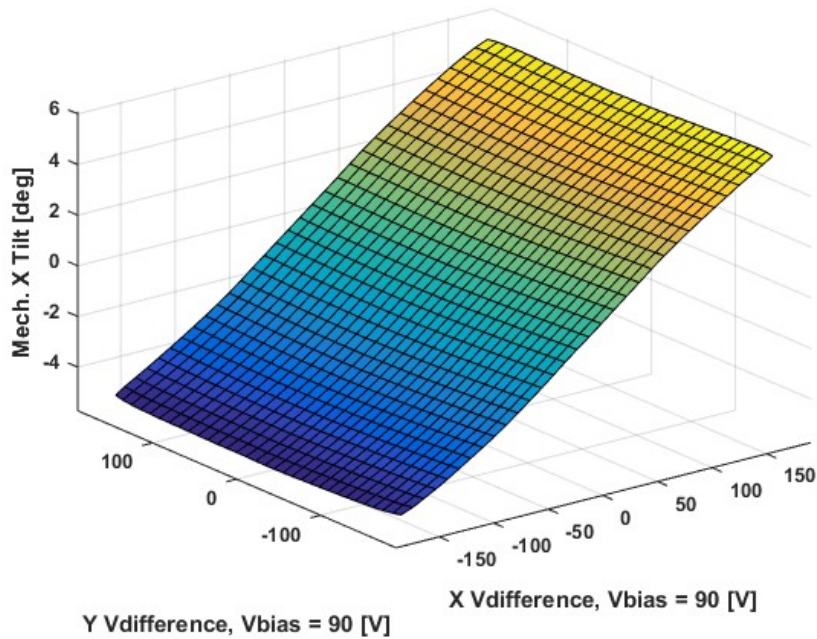


Y-Axis Step Response

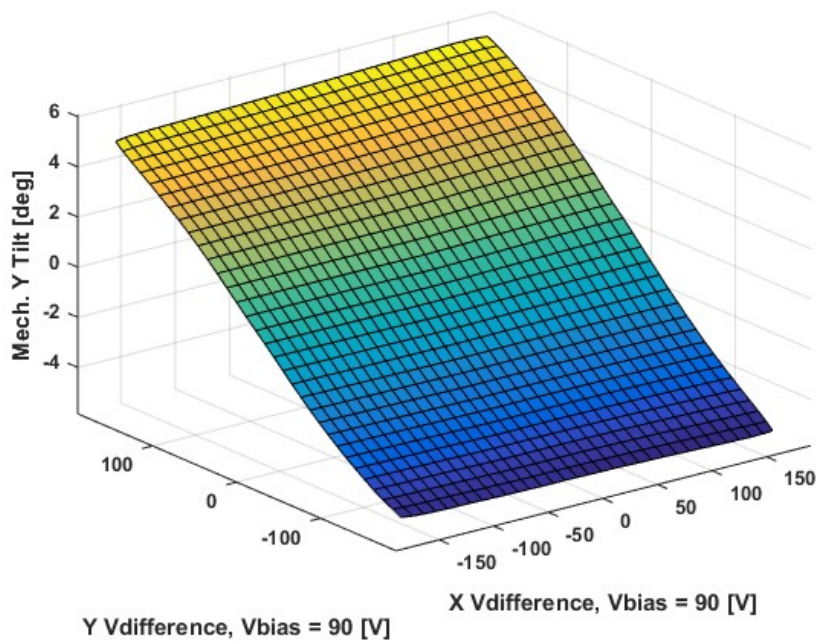


2D Lookup Tables

Voltage vs. X Mech. Angle - Lookup Table



Voltage vs. Y Mech. Angle - Lookup Table



Y vs. X Tilt - Addressable Mech. Angles

