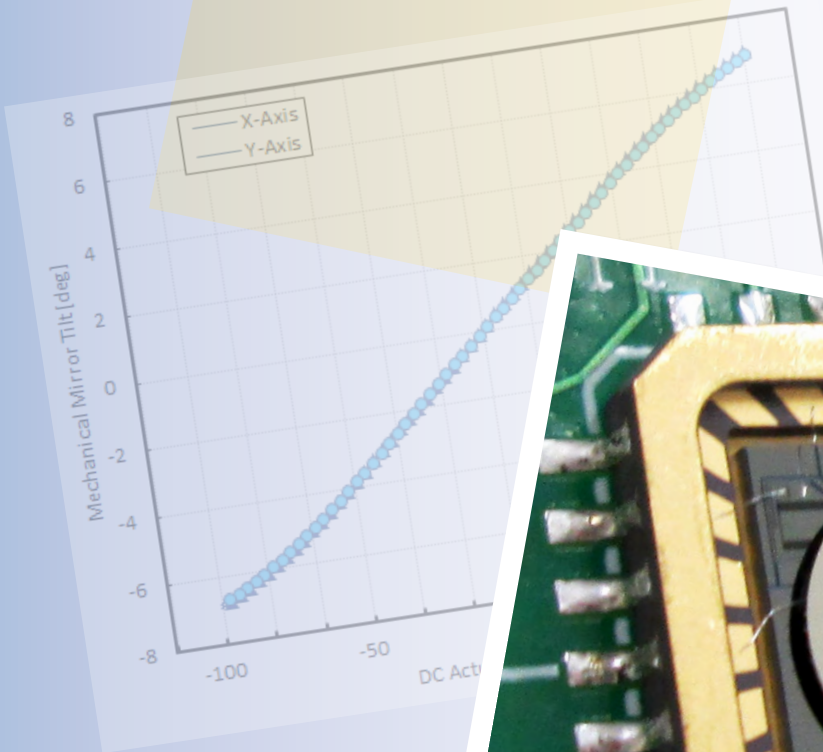




Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S41451



Device Parameters Summary

Device ID : S41451

Actuator Name: A8L2.2

Actuator Mode : Gimbal-less Dual-Axis Quasistatic

Mirror Type: Bonded

Mirror Size : 3.0mm diameter

Mirror Coating : Aluminum

Maximum Mech. Angle - X Axis [degrees] : 5.1759

Maximum Mech. Angle - Y Axis [degrees] : 5.1691

Maximum Vdifference - X Axis [V] : 162.7300

Maximum Vdifference - Y Axis [V] : 161.5500

Driver Bias Voltage (Vbias) [V] : 90

Maximum Mech. Angle - Coupled Axes [degrees] : 6.3956

Resonant Frequency - X Axis [Hz] : 706

Resonant Frequency - Y Axis [Hz] : 707

Quality Factor - X Axis : 64.5000

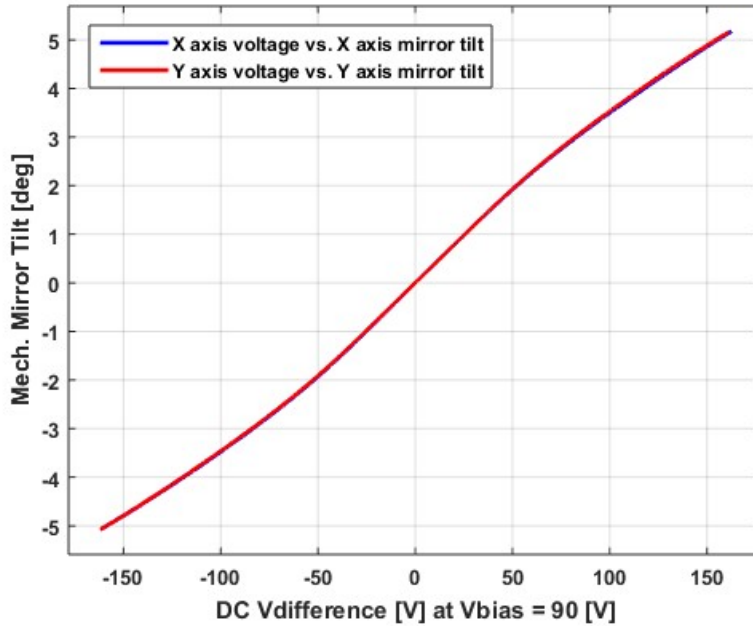
Quality Factor - Y Axis : 65.3000

Recommended LPF Cutoff Frequency (6th Order Bessel) [Hz] : 250

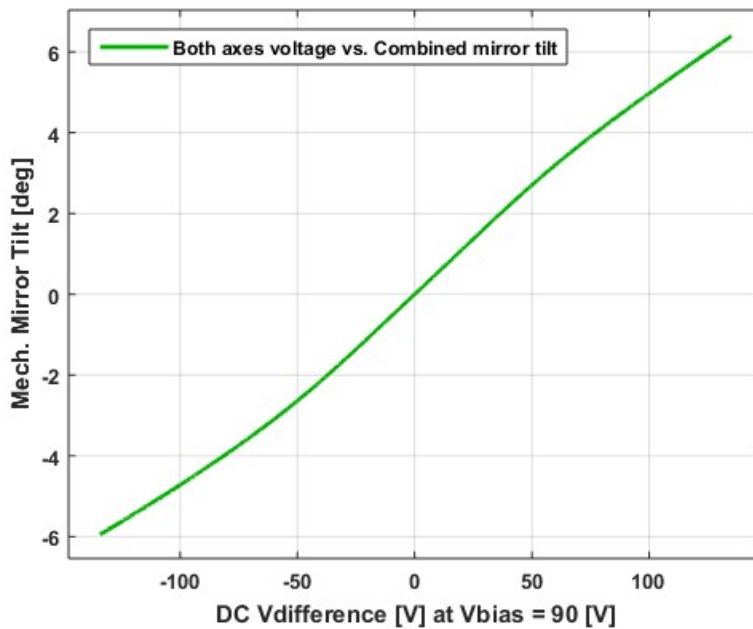
Date and Time Report was Created: 08-Jun-2018 at 14:49:46

Static Response

Voltage vs. Mech. Angle - Individual Axes

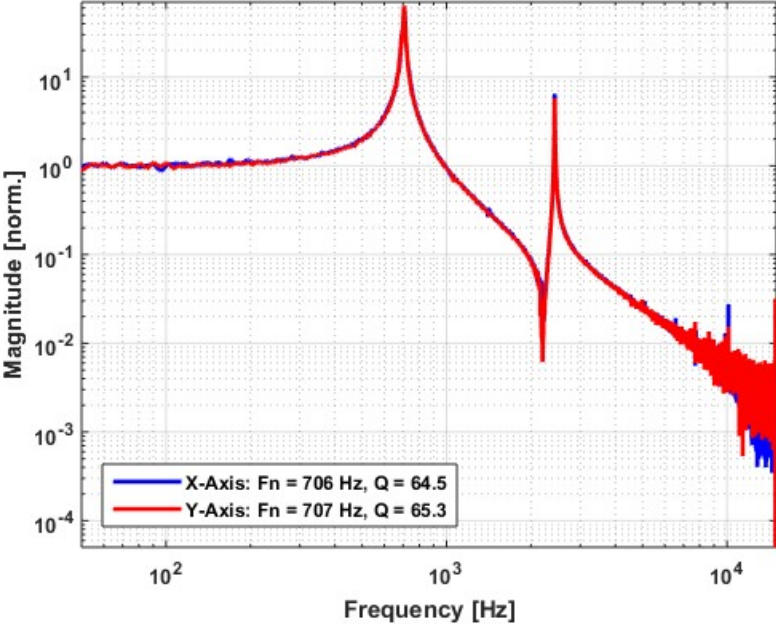


Voltage vs. Mech. Angle - Coupled Axes

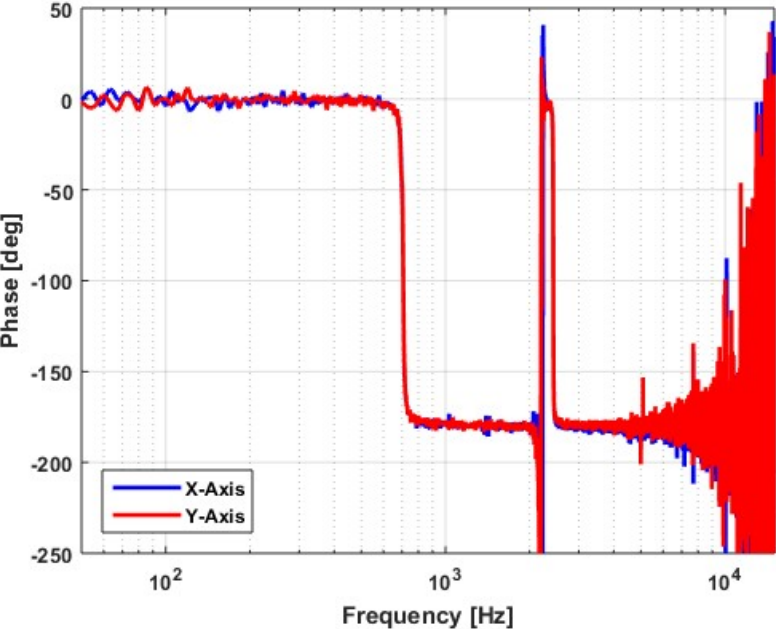


Frequency Response

Small Signal Frequency Response - Magnitude

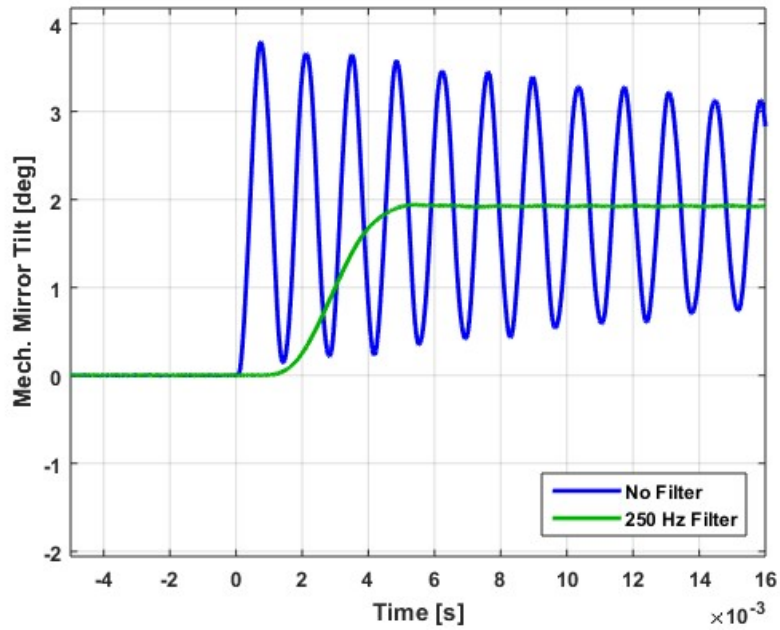


Small Signal Frequency Response - Phase

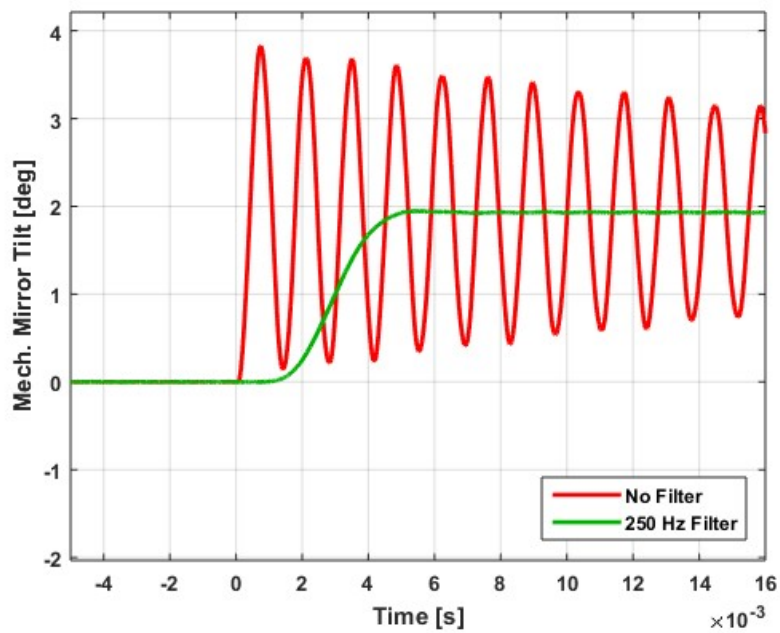


Step Response

X-Axis Step Response

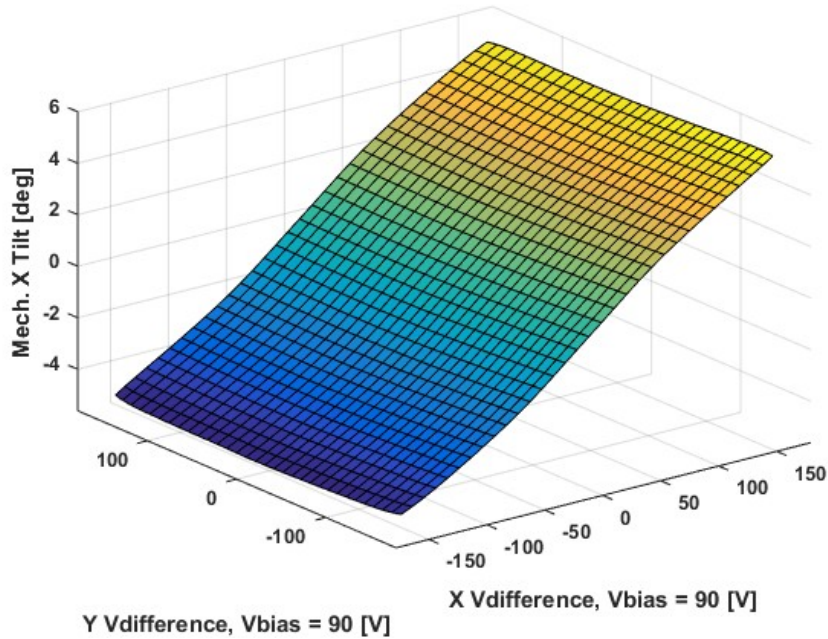


Y-Axis Step Response

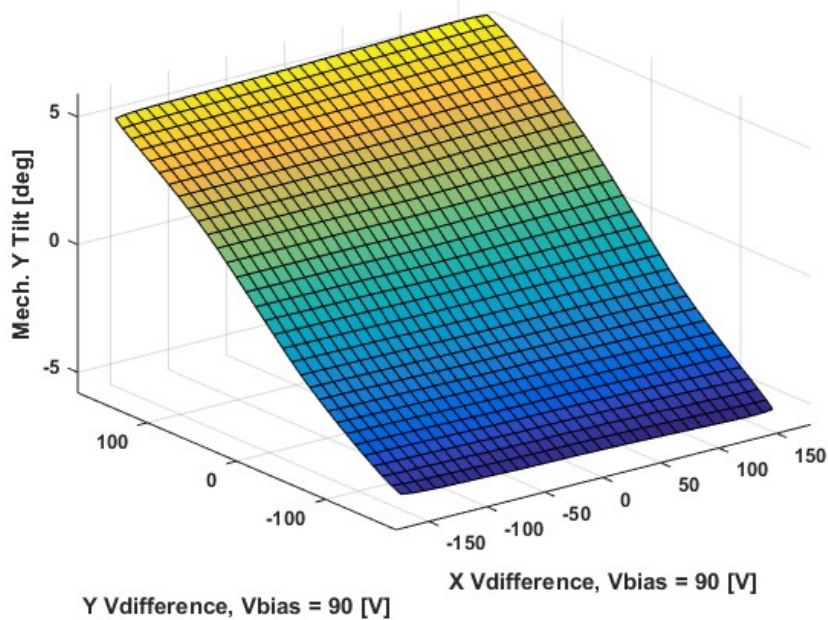


2D Lookup Tables

Voltage vs. X Mech. Angle - Lookup Table



Voltage vs. Y Mech. Angle - Lookup Table



Y vs. X Tilt - Addressable Mech. Angles

