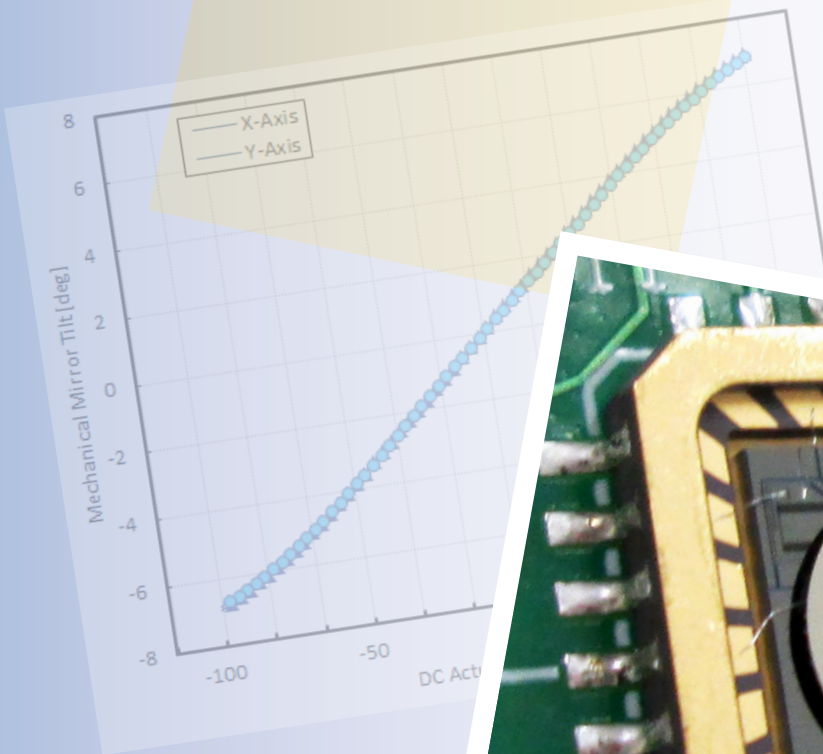




Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S46743



Device Parameters Summary

Device ID : S46743

Actuator Type: A5L2.2

Actuator Mode : Gimbal-less Dual-Axis Quasistatic

Mirror Type and Size : Bonded mirror of 5.0mm diameter

Mirror Coating : Gold

Maximum Mech. Angle - X Axis [degrees] : 1.2505

Maximum Mech. Angle - Y Axis [degrees] : 1.2453

Maximum Vdifference - X Axis [V] : 173

Maximum Vdifference - Y Axis [V] : 173

Driver Bias Voltage (Vbias) [V] : 90

Maximum Mech. Angle - Coupled Axes [degrees] : 1.5040

Resonant Frequency - X Axis [Hz] : 1245

Resonant Frequency - Y Axis [Hz] : 1250

Quality Factor - X Axis : 61

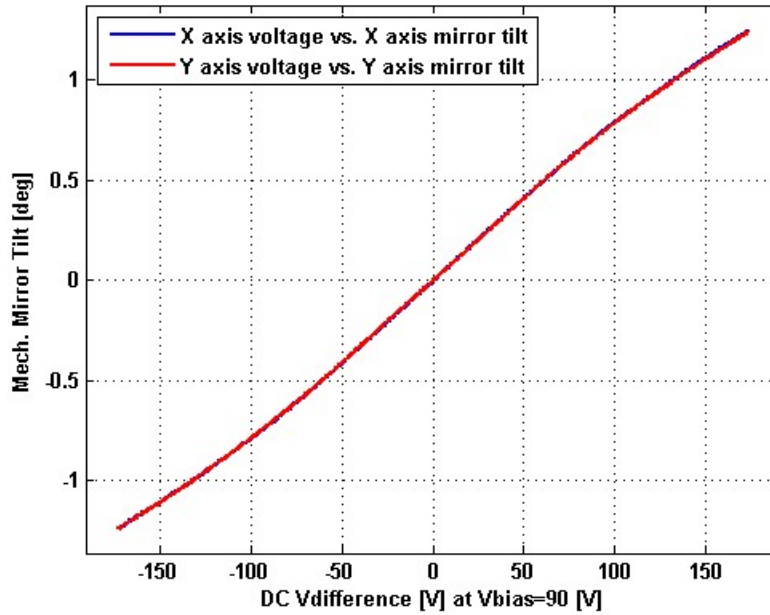
Quality Factor - Y Axis : 61

Recommended LPF Cutoff Frequency (6th Order Bessel) [Hz] : 440

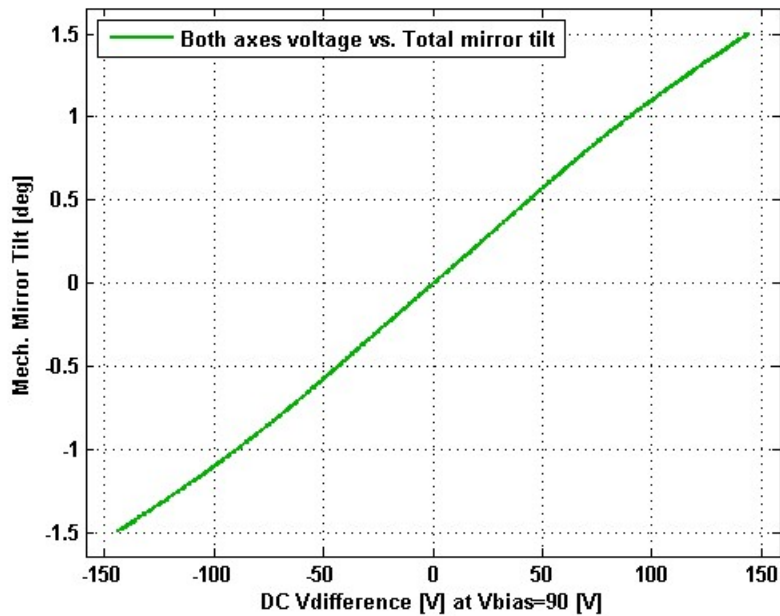
Date and Time Report was Created: 15-Jul-2020 at 10:56:39

Static Response

Voltage vs. Mech. Angle - Individual Axes

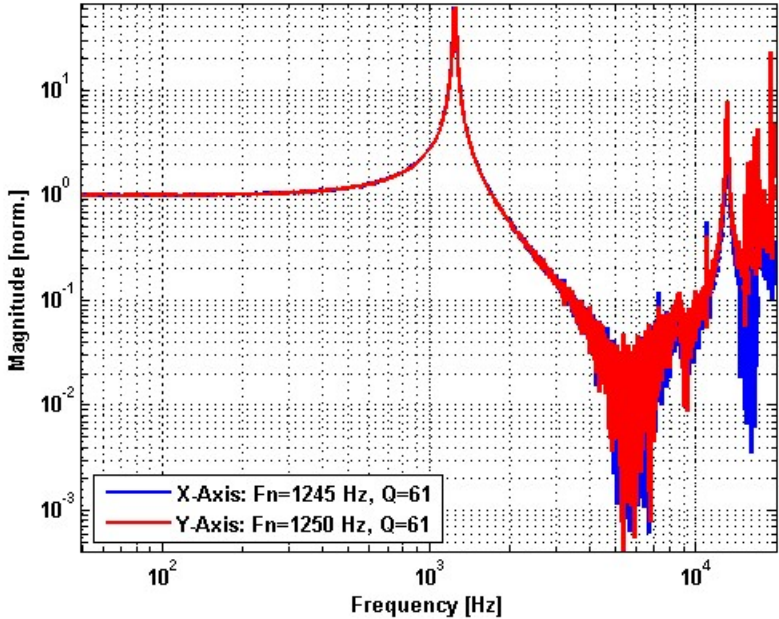


Voltage vs. Mech. Angle - Coupled Axes

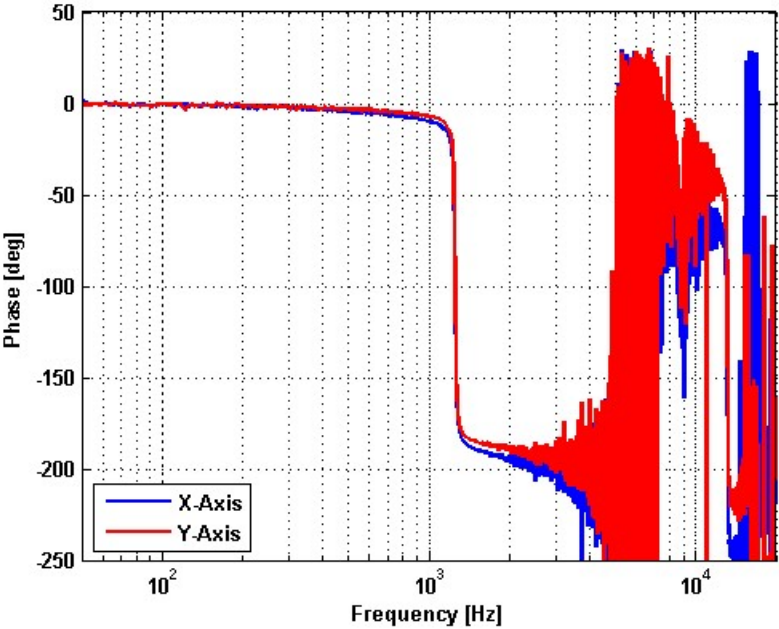


Frequency Response

Small Signal Frequency Response - Magnitude

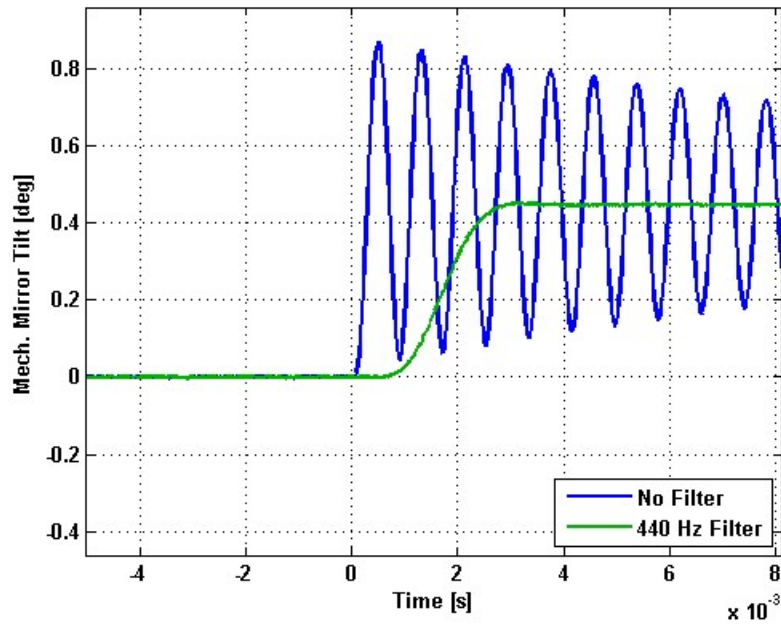


Small Signal Frequency Response - Phase

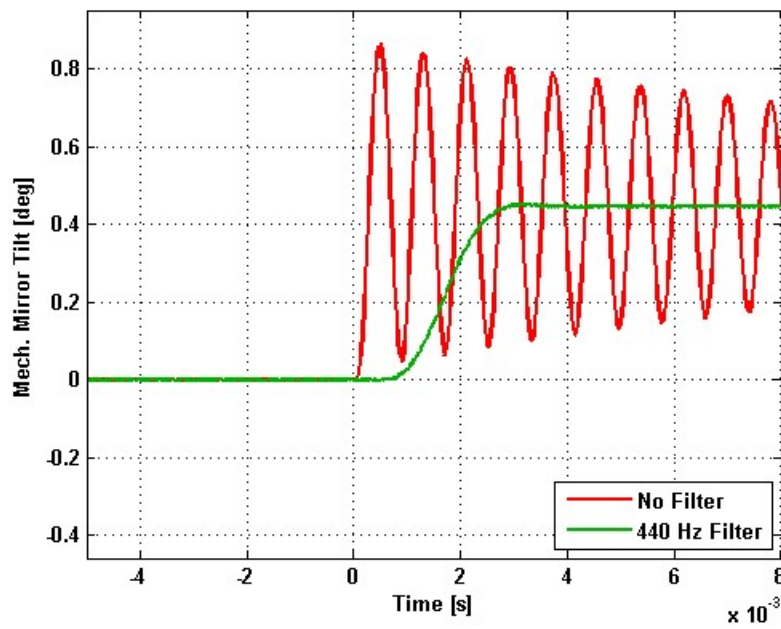


Step Response

X-Axis Step Response

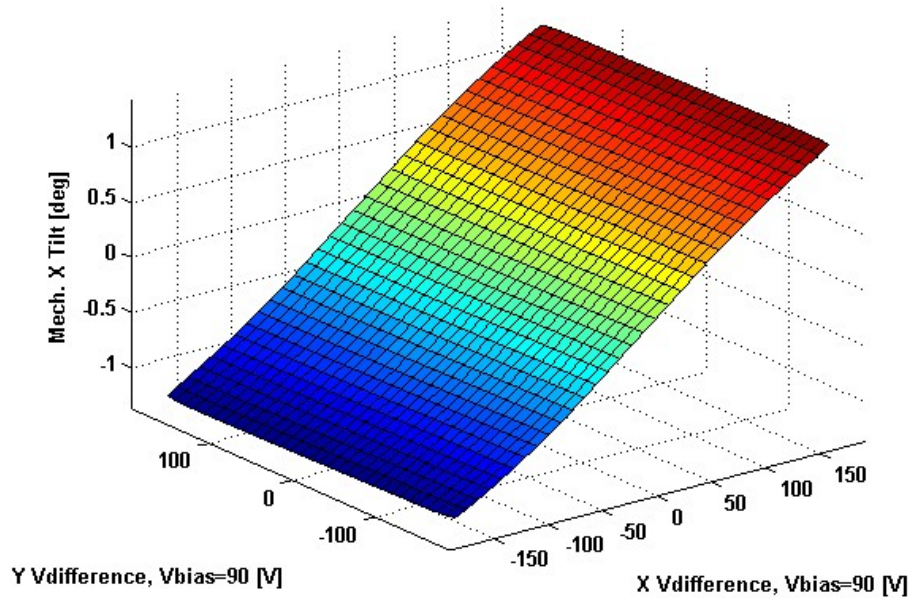


Y-Axis Step Response

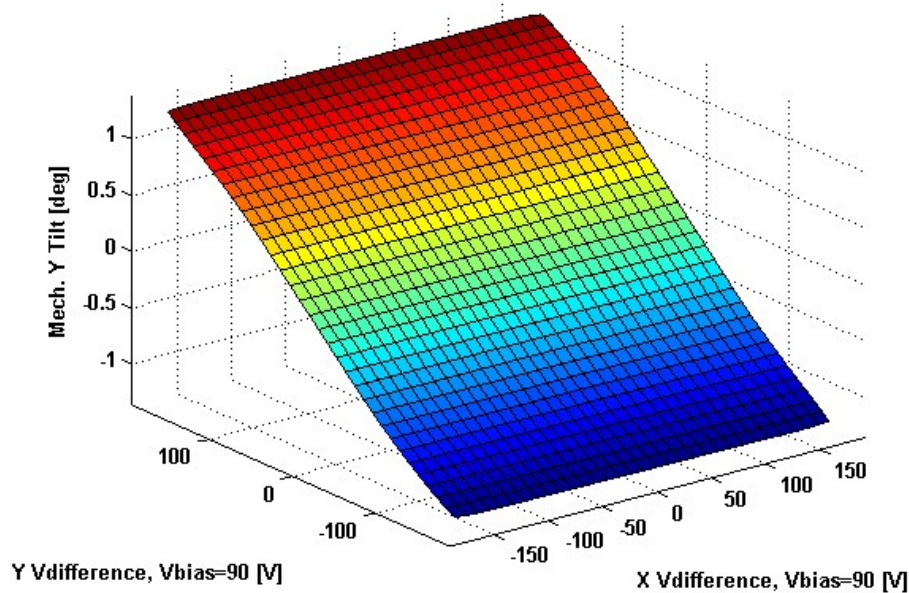


2D Lookup Tables

Voltage vs. X Mech. Angle - Lookup Table



Voltage vs. Y Mech. Angle - Lookup Table



Y vs. X Tilt - Addressable Mech. Angles

