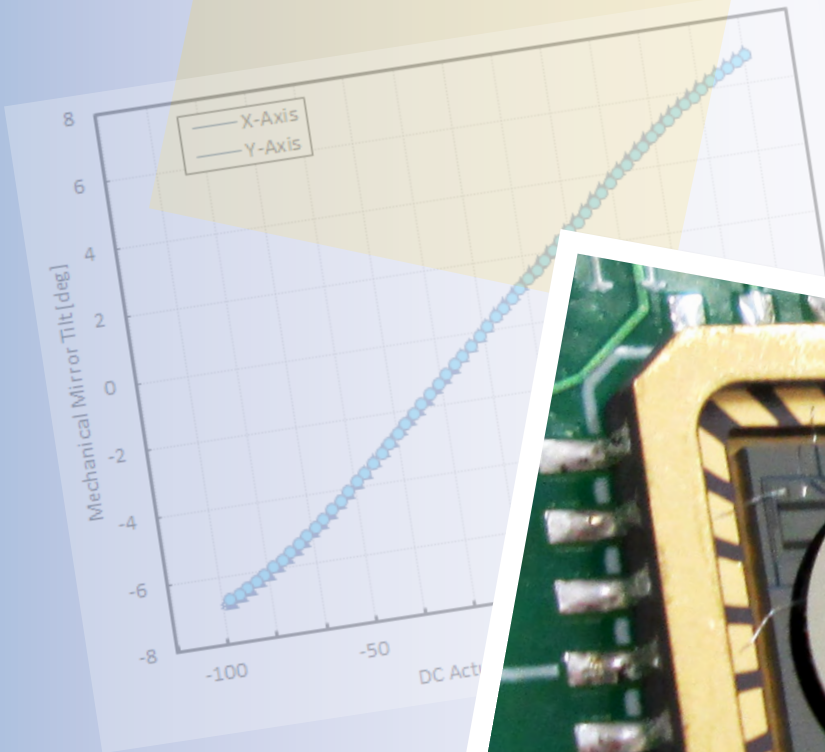




Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S46578



Device Parameters Summary

Device ID : S46578

Actuator Type: A5L2.2

Actuator Mode : Gimbal-less Dual-Axis Quasistatic

Mirror Type and Size : Bonded mirror of 6.4mm diameter

Mirror Coating : Gold

Maximum Mech. Angle - X Axis [degrees] : 1.2400

Maximum Mech. Angle - Y Axis [degrees] : 1.2212

Maximum Vdifference - X Axis [V] : 173

Maximum Vdifference - Y Axis [V] : 173

Driver Bias Voltage (Vbias) [V] : 90

Maximum Mech. Angle - Coupled Axes [degrees] : 1.4875

Resonant Frequency - X Axis [Hz] : 691

Resonant Frequency - Y Axis [Hz] : 691

Quality Factor - X Axis : 56

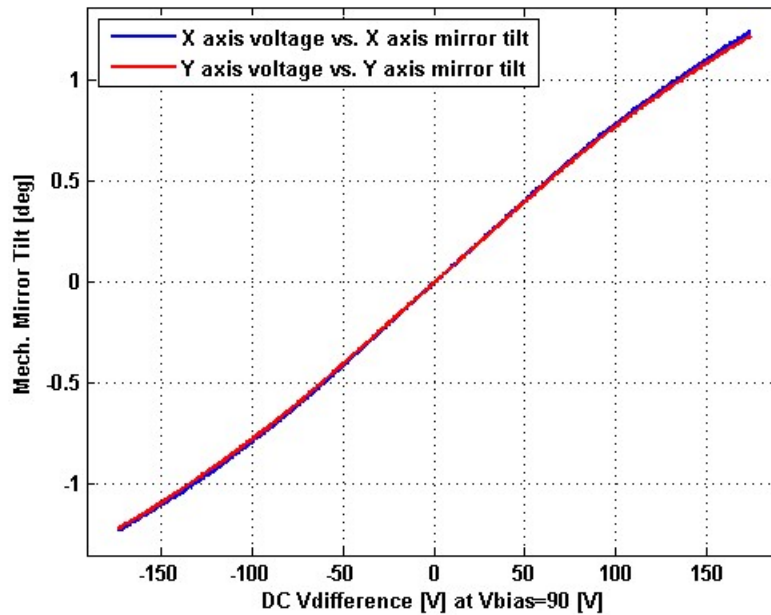
Quality Factor - Y Axis : 56

Recommended LPF Cutoff Frequency (6th Order Bessel) [Hz] : 300

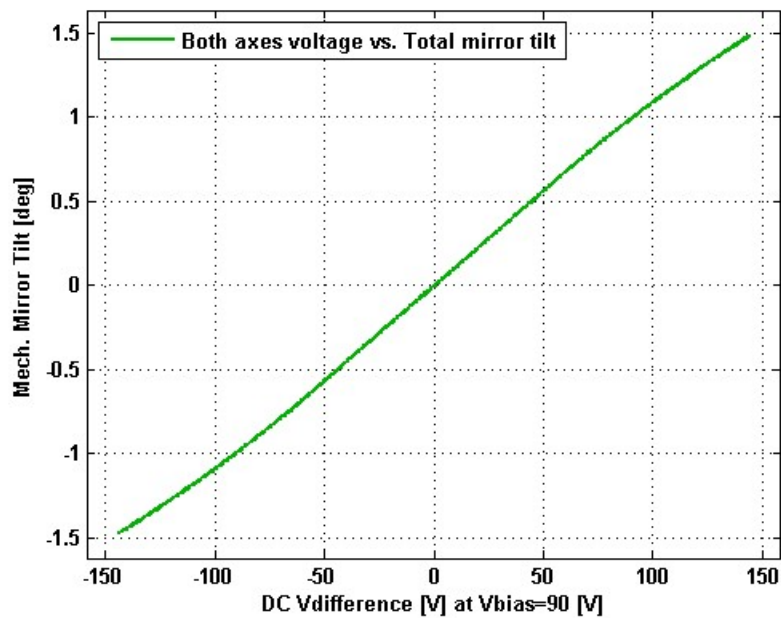
Date and Time Report was Created: 03-Jun-2020 at 16:1:52

Static Response

Voltage vs. Mech. Angle - Individual Axes

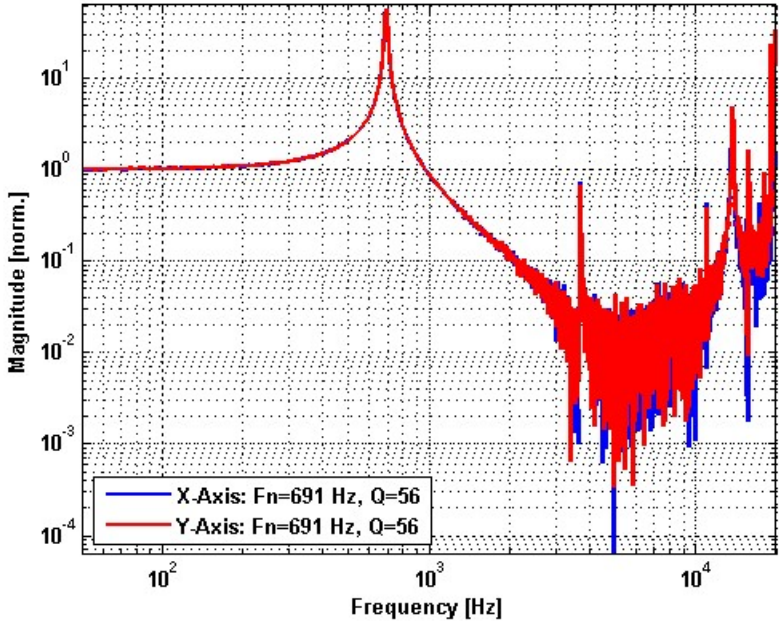


Voltage vs. Mech. Angle - Coupled Axes

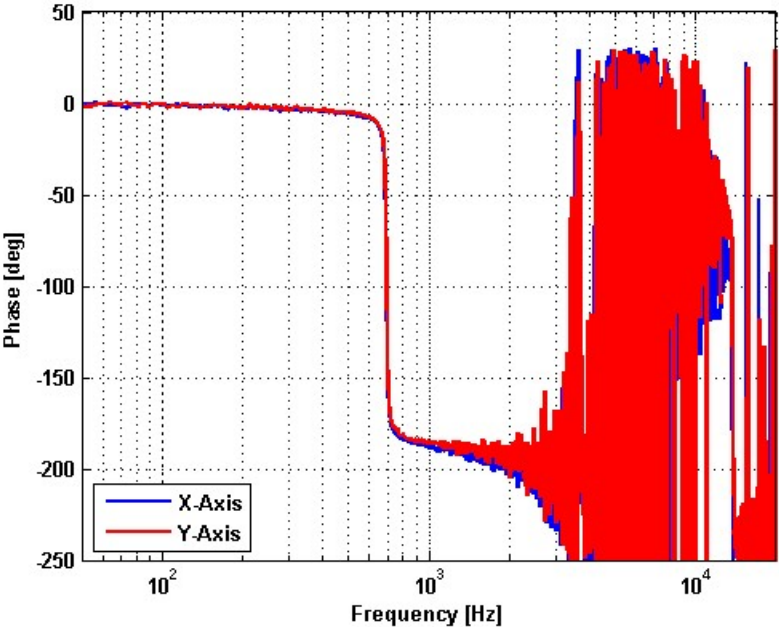


Frequency Response

Small Signal Frequency Response - Magnitude

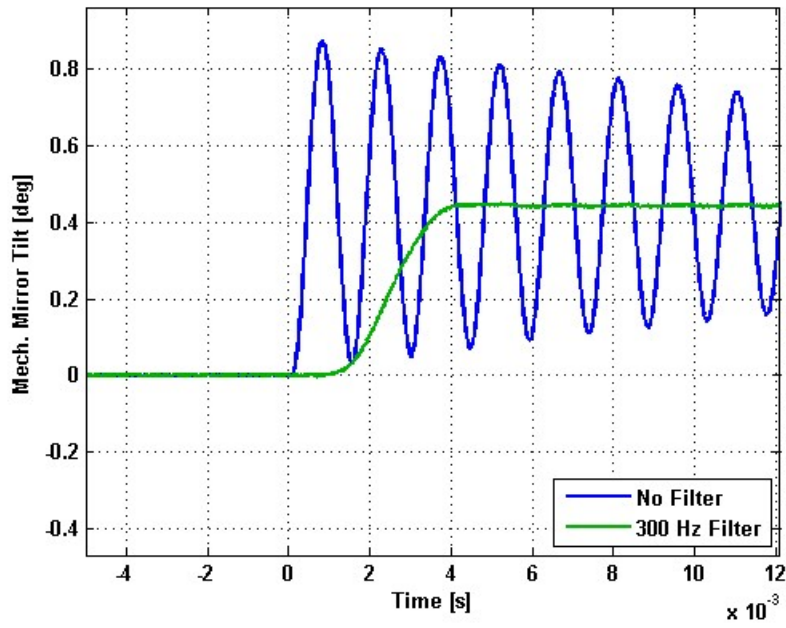


Small Signal Frequency Response - Phase

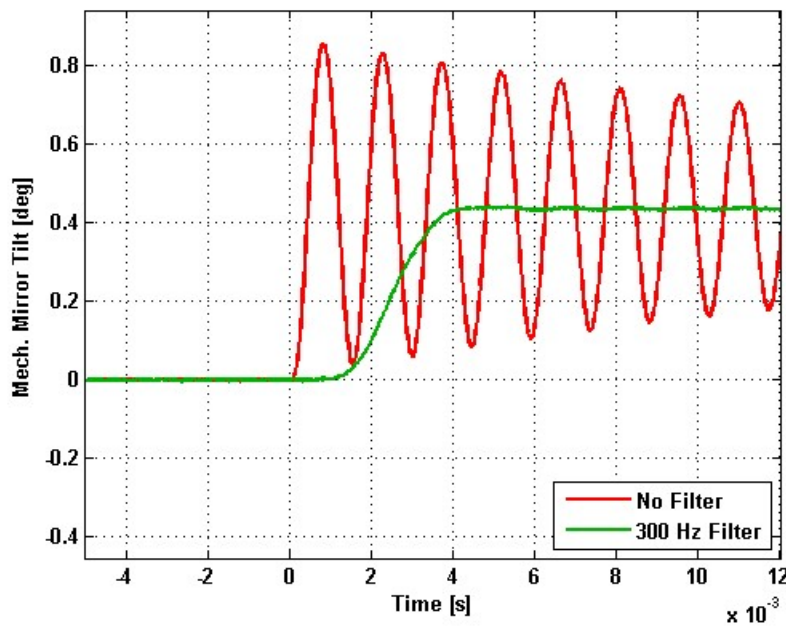


Step Response

X-Axis Step Response

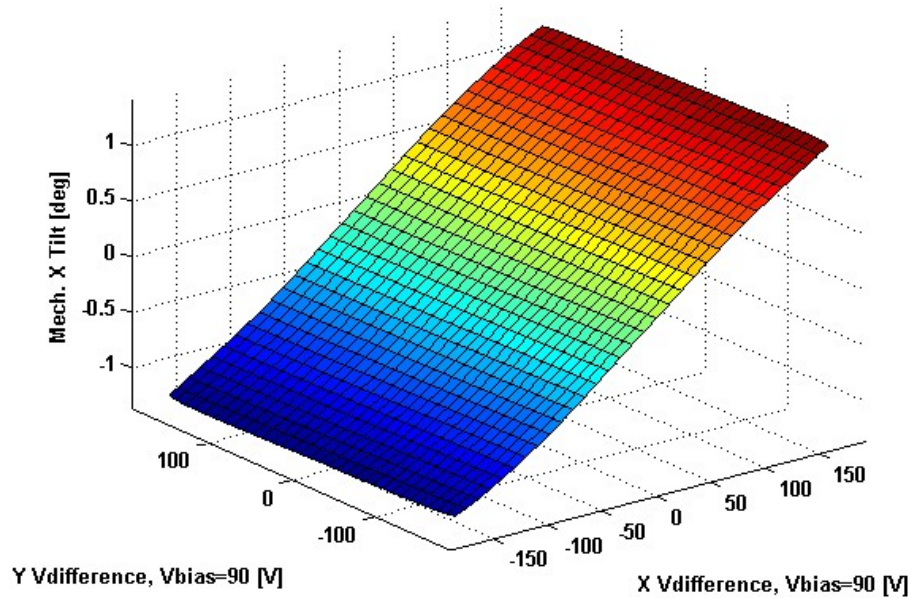


Y-Axis Step Response

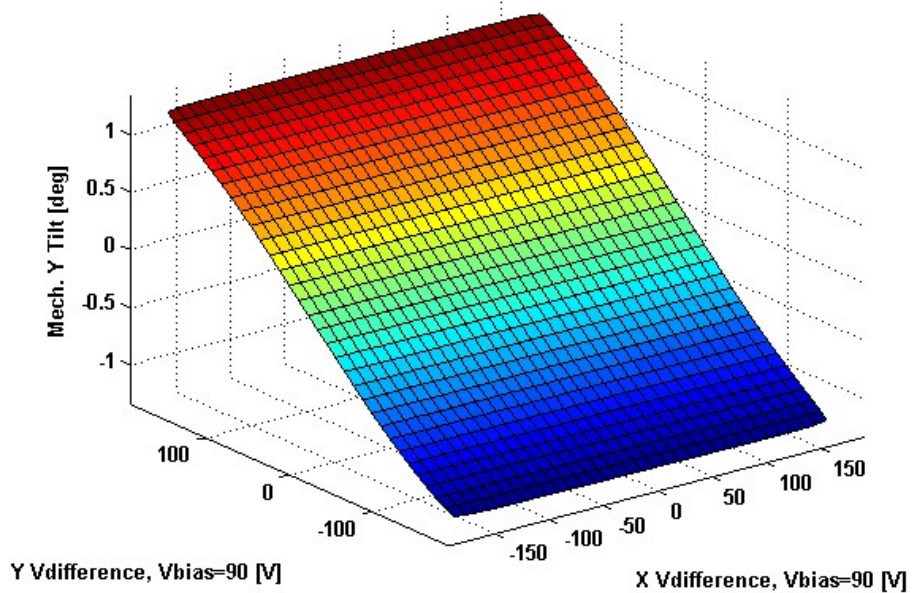


2D Lookup Tables

Voltage vs. X Mech. Angle - Lookup Table



Voltage vs. Y Mech. Angle - Lookup Table



Y vs. X Tilt - Addressable Mech. Angles

