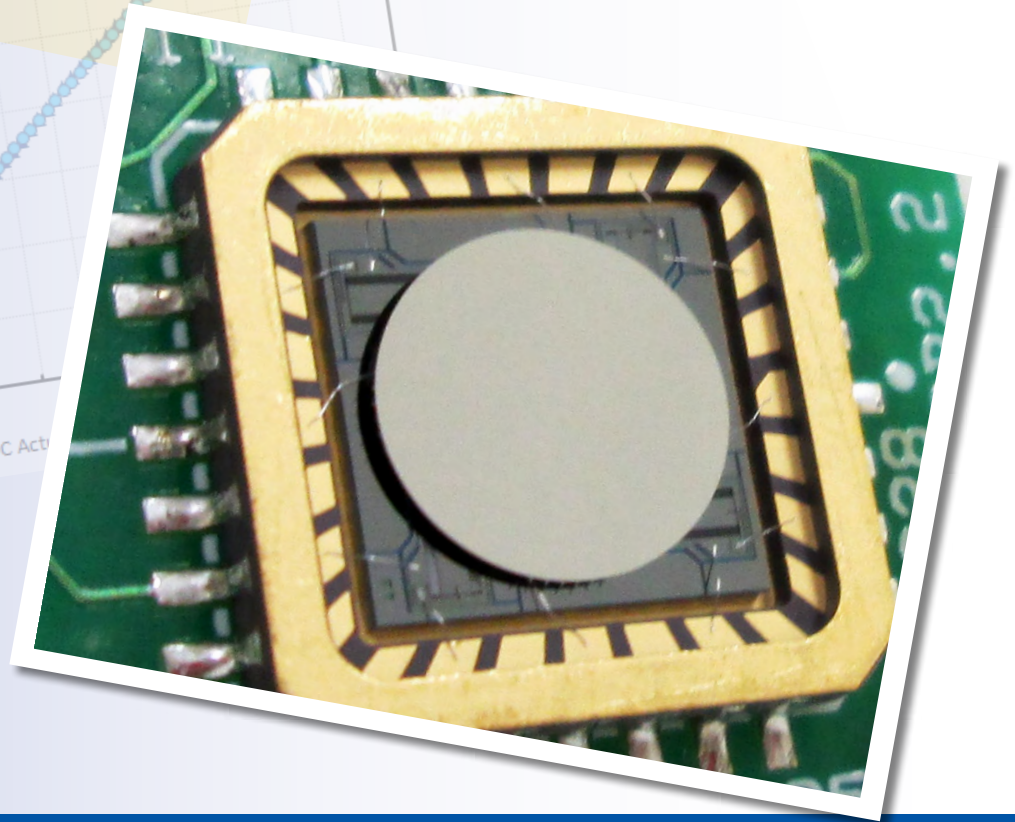
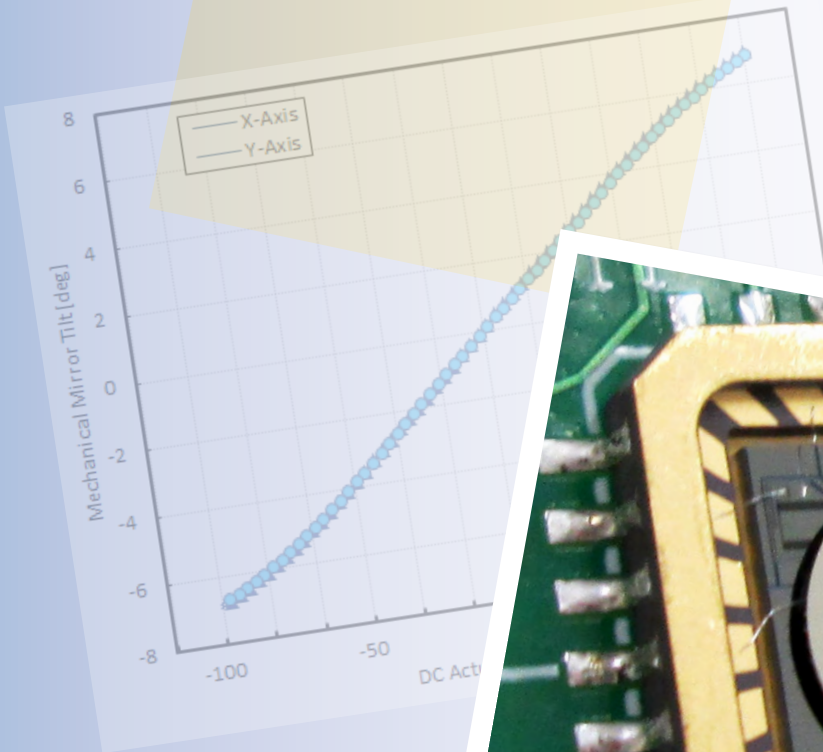




Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S45835



Device Parameters Summary

Device ID : S45835

Actuator Type: A5L3.3(C1)

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] : 2.7803

Maximum Mech. Angle - Y Axis [degrees] : 2.8252

Maximum Vdifference - X Axis [V] : 181

Maximum Vdifference - Y Axis [V] : 181

Driver Bias Voltage (Vbias) [V] : 90

Maximum Mech. Angle - Coupled Axes [degrees] : 3.5677

Resonant Frequency - X Axis [Hz] : 339

Resonant Frequency - Y Axis [Hz] : 337

Quality Factor - X Axis : 33

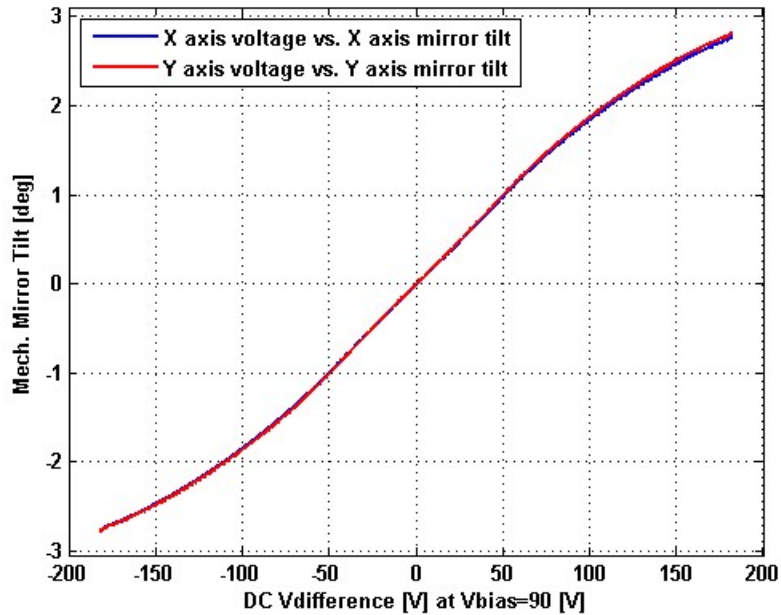
Quality Factor - Y Axis : 31

Recommended LPF Cutoff Frequency (6th Order Bessel) [Hz] : 120

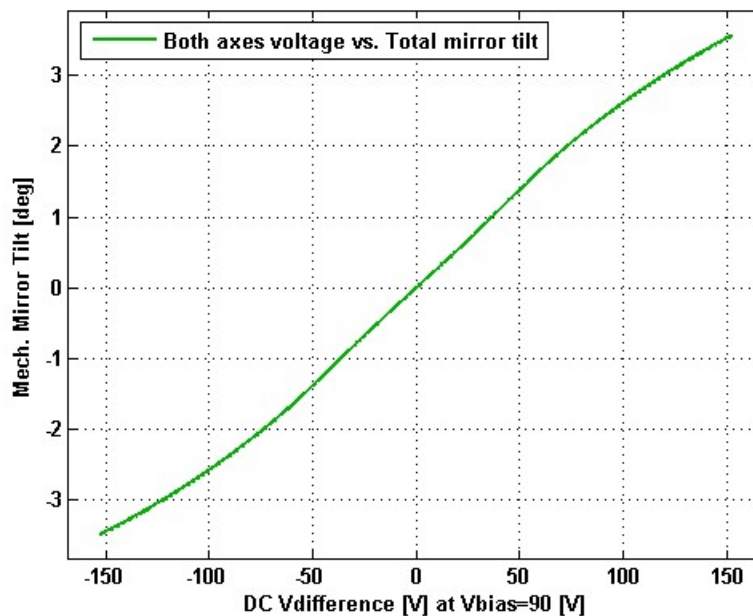
Date and Time Report was Created: 19-Jul-2019 at 19:1:3

Static Response

Voltage vs. Mech. Angle - Individual Axes

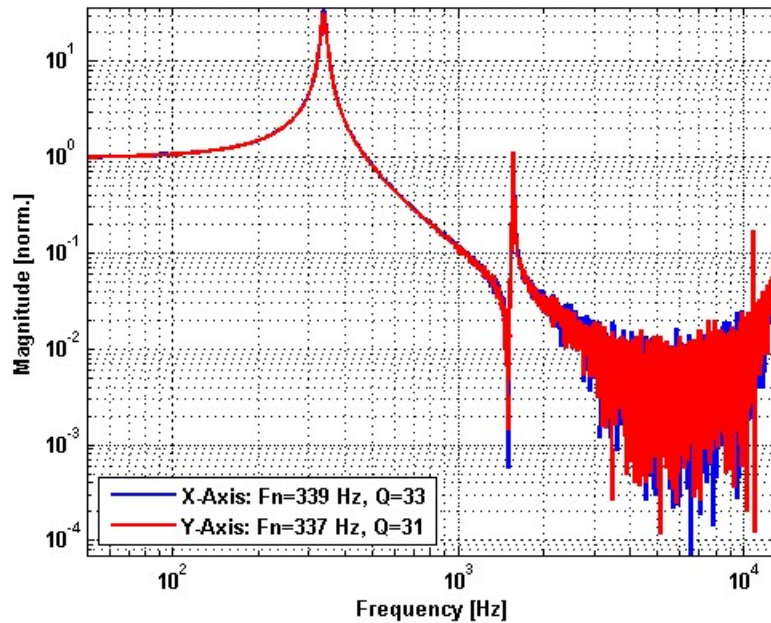


Voltage vs. Mech. Angle - Coupled Axes

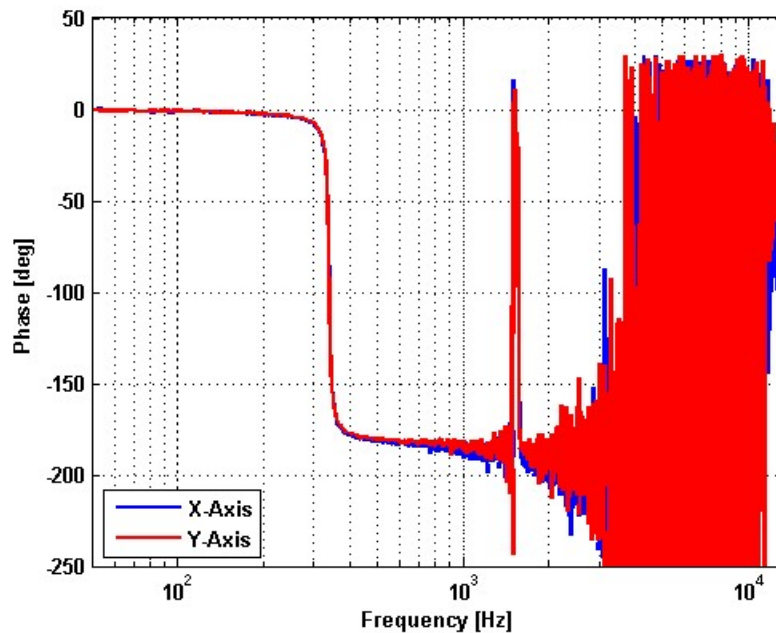


Frequency Response

Small Signal Frequency Response - Magnitude

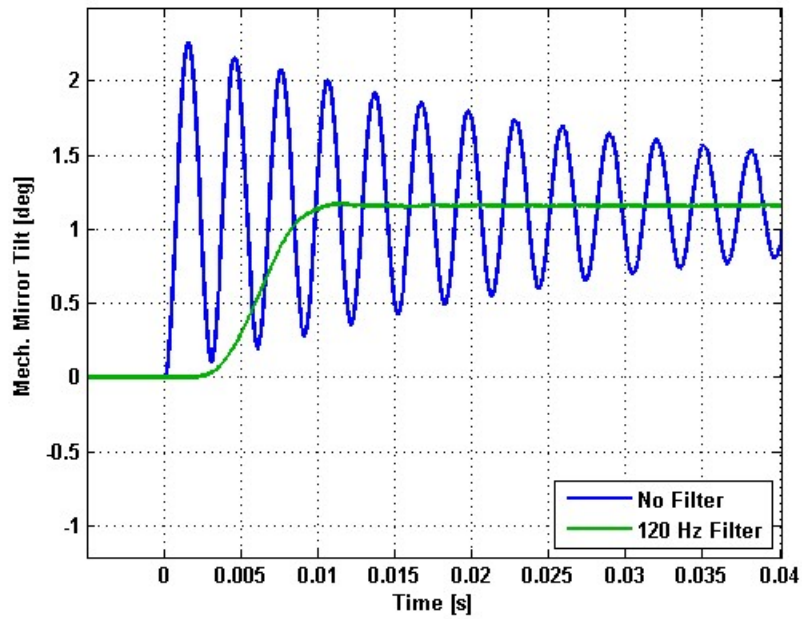


Small Signal Frequency Response - Phase

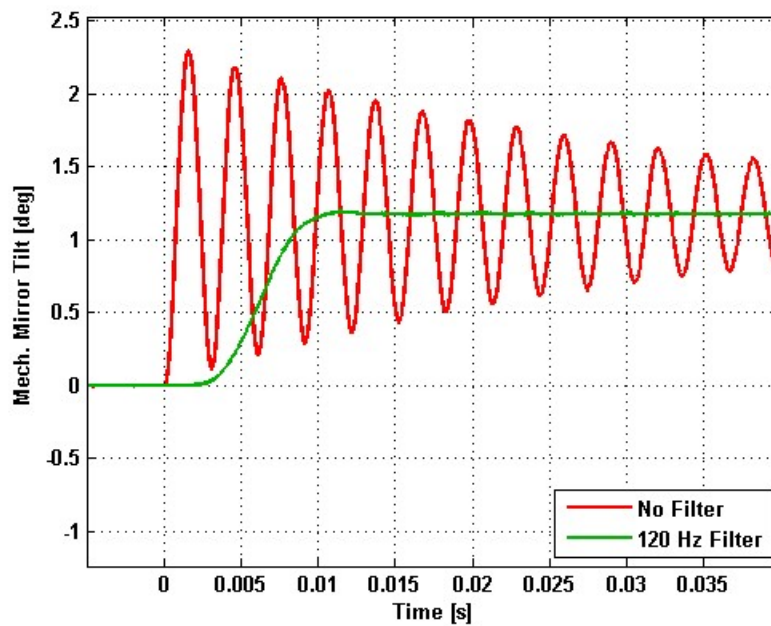


Step Response

X-Axis Step Response

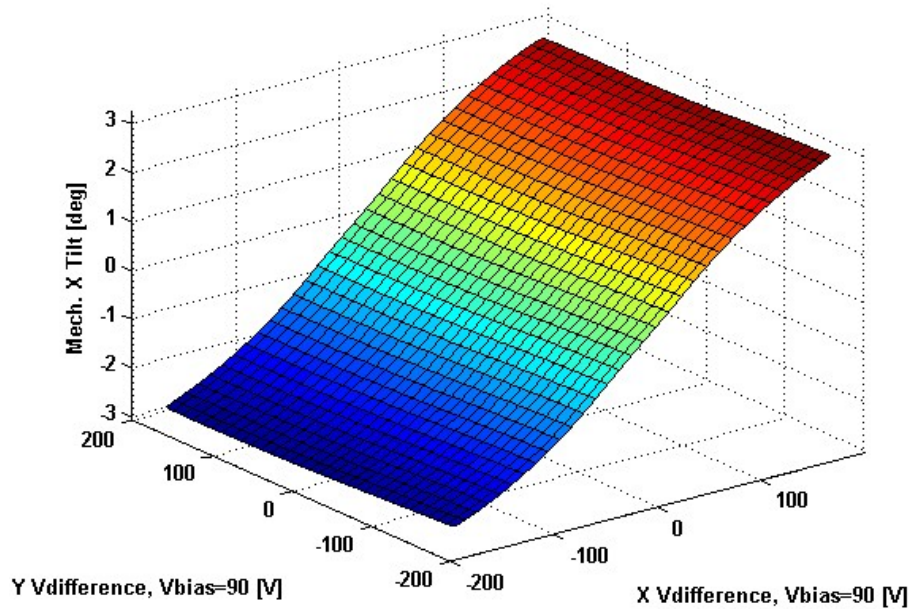


Y-Axis Step Response

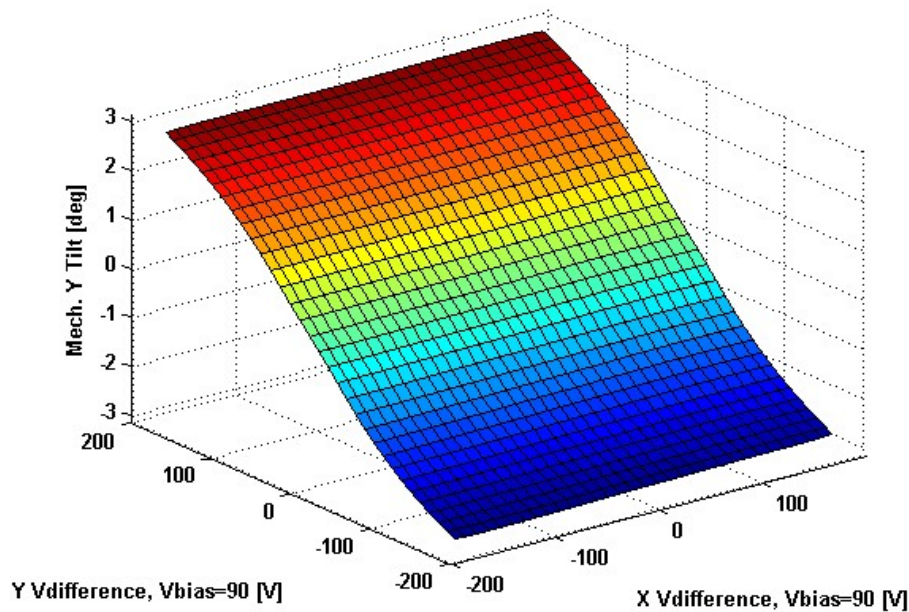


2D Lookup Tables

Voltage vs. X Mech. Angle - Lookup Table



Voltage vs. Y Mech. Angle - Lookup Table



Y vs. X Tilt - Addressable Mech. Angles

