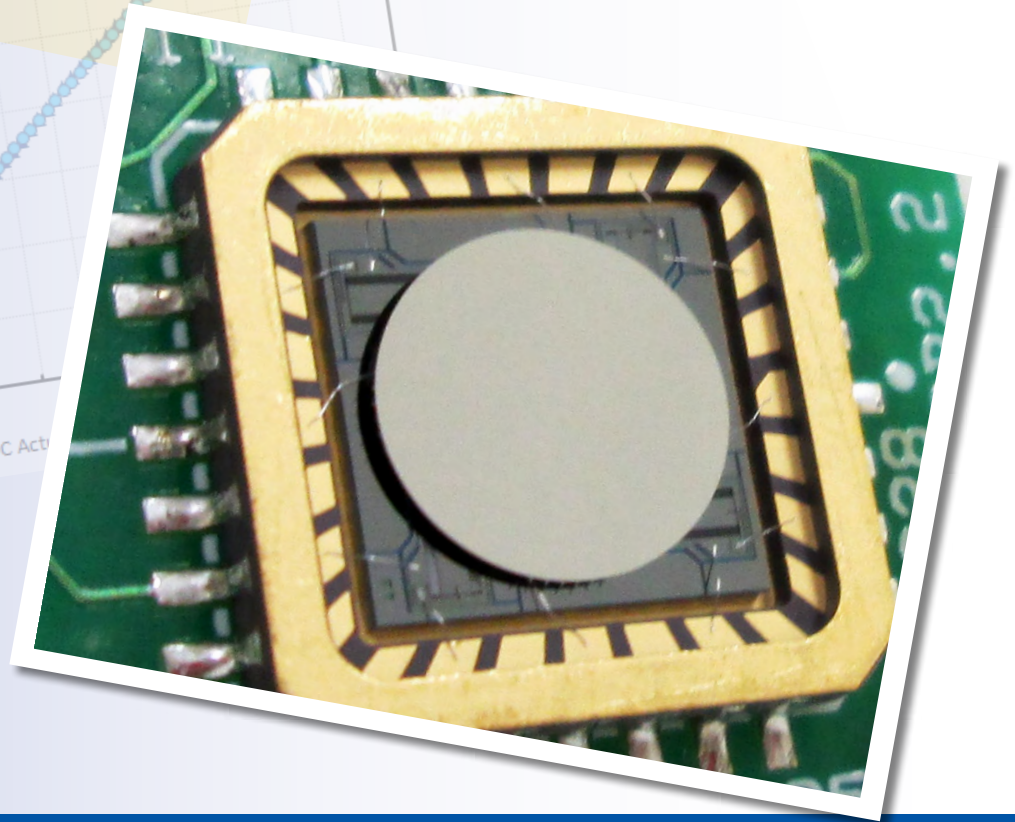
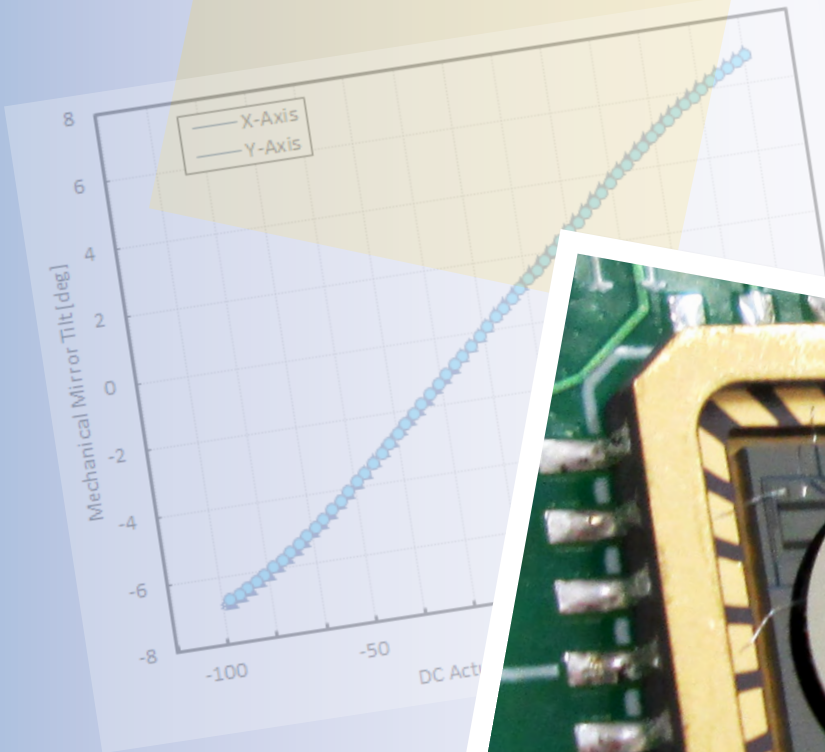




Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S45842



Device Parameters Summary

Device ID : S45842

Actuator Type: A5L3.3(C2)

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] : 4.4008

Maximum Mech. Angle - Y Axis [degrees] : 4.4307

Maximum Vdifference - X Axis [V] : 180

Maximum Vdifference - Y Axis [V] : 180

Driver Bias Voltage (Vbias) [V] : 90

Maximum Mech. Angle - Coupled Axes [degrees] : 6.3435

Resonant Frequency - X Axis [Hz] : 388

Resonant Frequency - Y Axis [Hz] : 386

Quality Factor - X Axis : 31

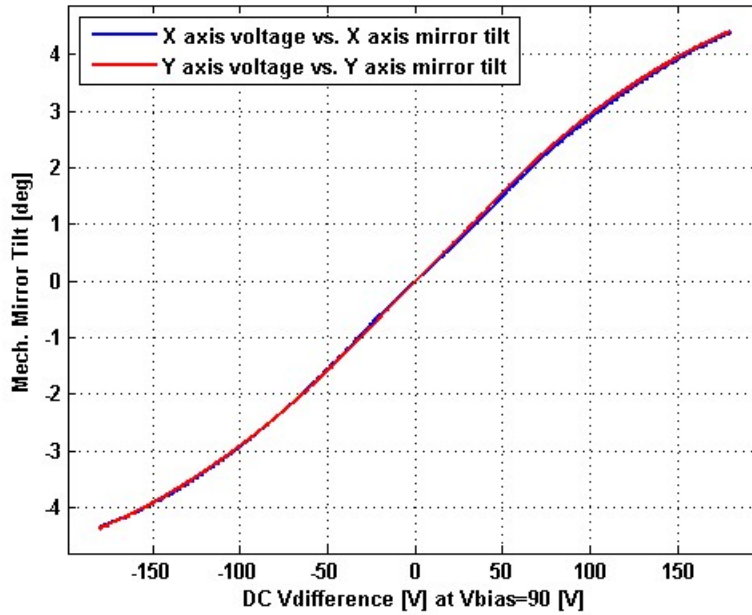
Quality Factor - Y Axis : 33

Recommended LPF Cutoff Frequency (6th Order Bessel) [Hz] : 140

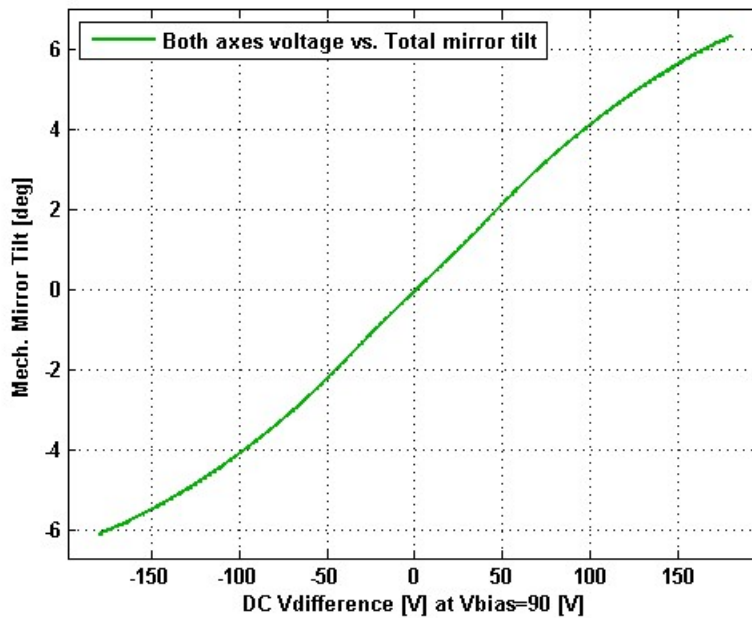
Date and Time Report was Created: 22-Aug-2019 at 18:31:16

Static Response

Voltage vs. Mech. Angle - Individual Axes

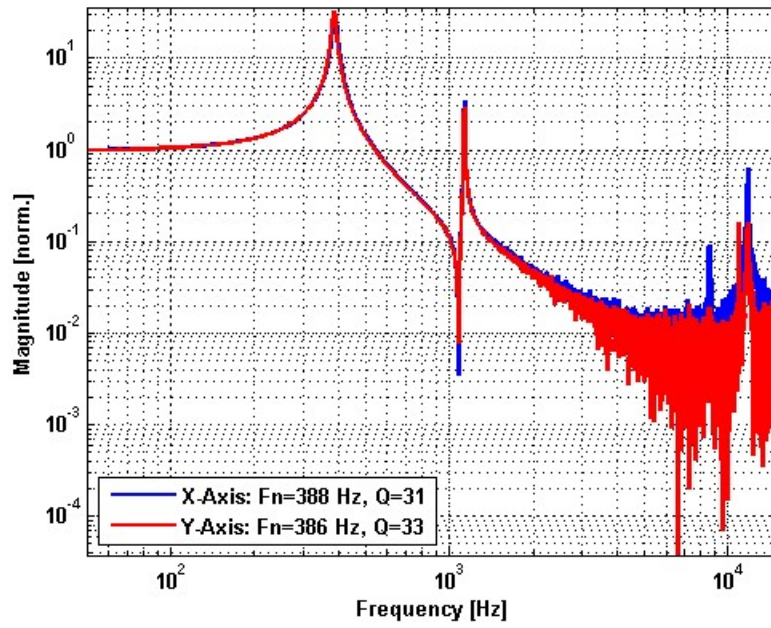


Voltage vs. Mech. Angle - Coupled Axes

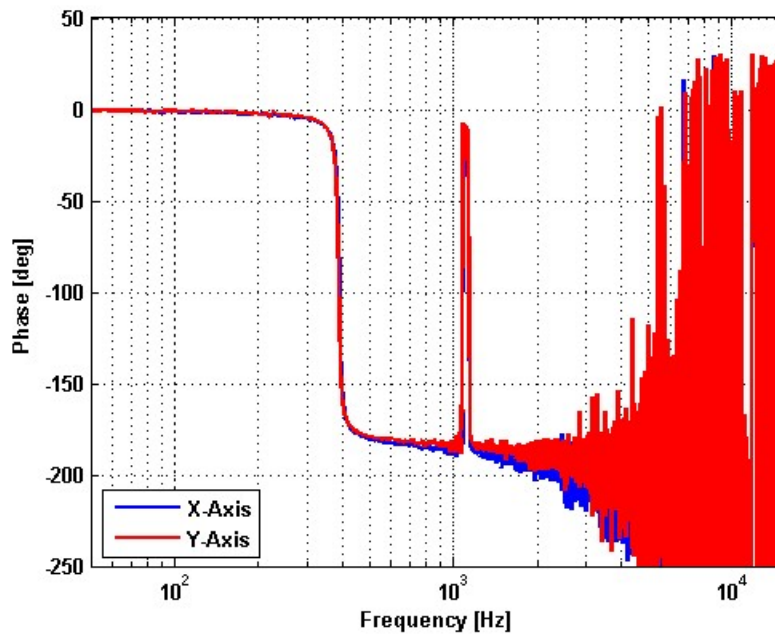


Frequency Response

Small Signal Frequency Response - Magnitude

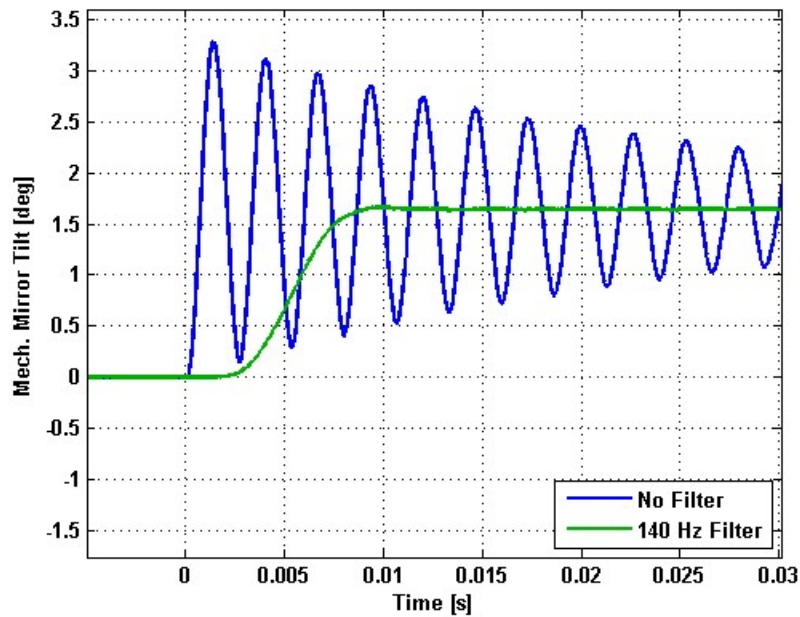


Small Signal Frequency Response - Phase

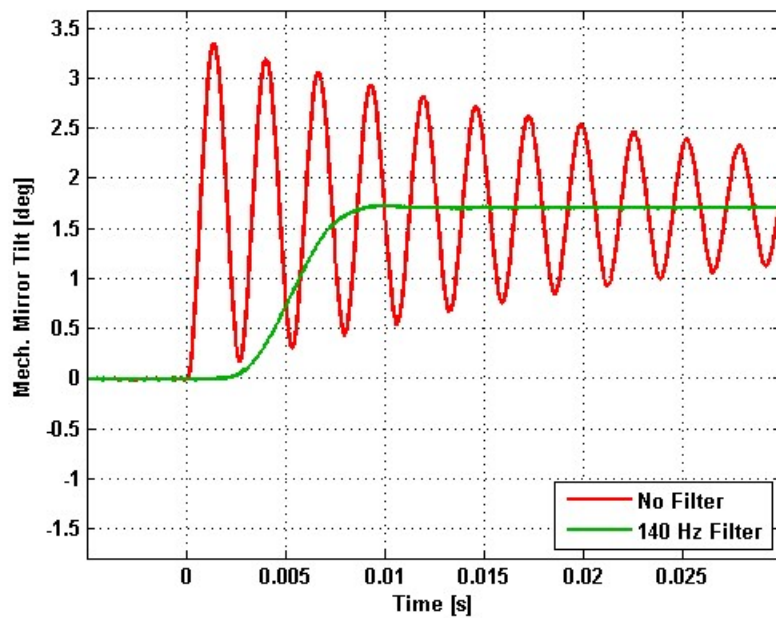


Step Response

X-Axis Step Response

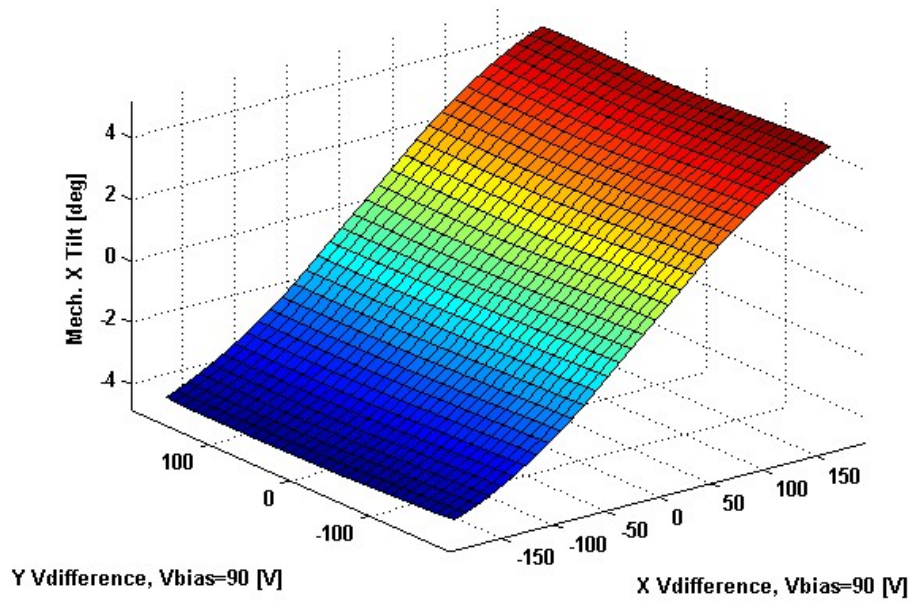


Y-Axis Step Response

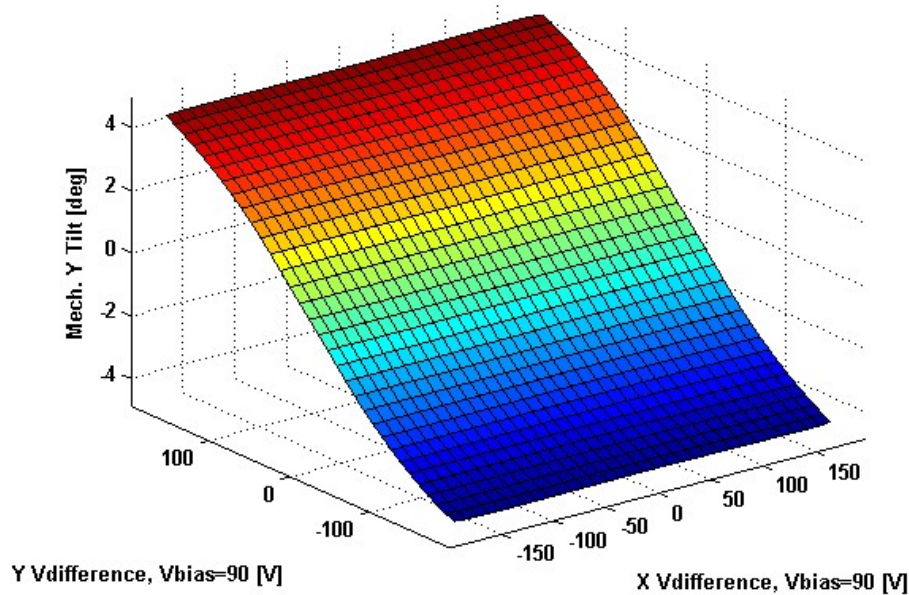


2D Lookup Tables

Voltage vs. X Mech. Angle - Lookup Table



Voltage vs. Y Mech. Angle - Lookup Table



Y vs. X Tilt - Addressable Mech. Angles

