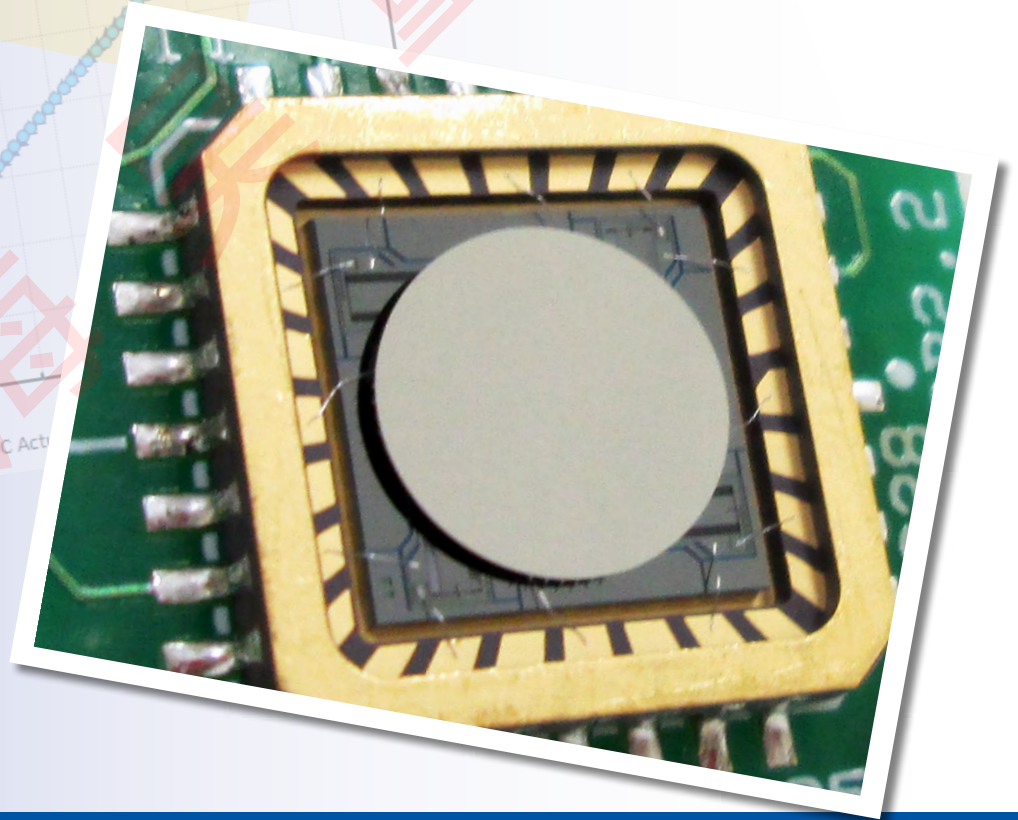
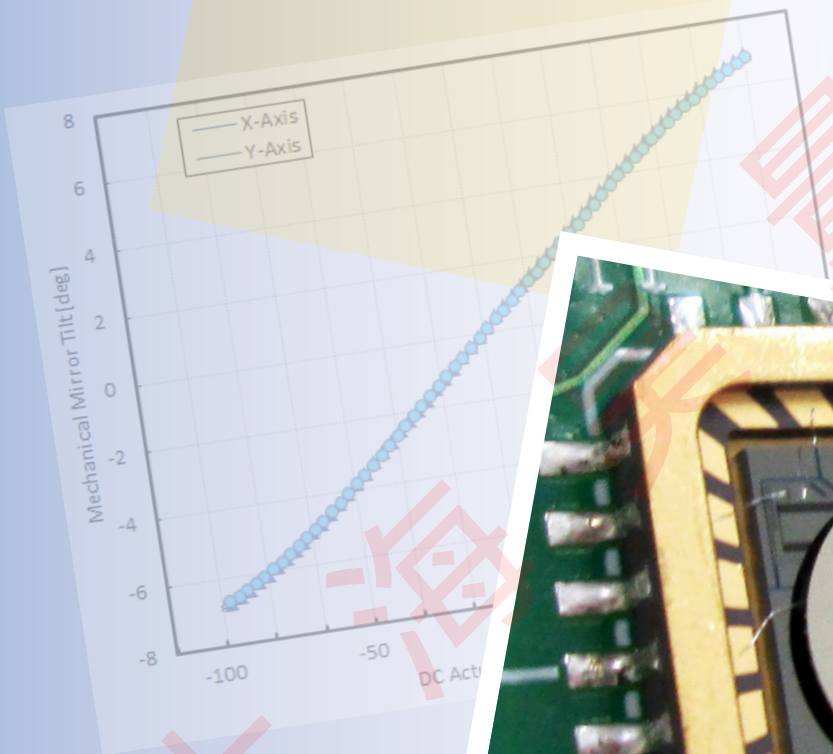


Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S42168



Device Parameters Summary

Device ID : S42168

Actuator Name: A5L2.1

Actuator Mode : Gimbal-less Dual-Axis Quasistatic

Mirror Type: Bonded

Mirror Size : 4.6mm diameter

Mirror Coating : Aluminum

Maximum Mech. Angle - X Axis [degrees] : 1.0534

Maximum Mech. Angle - Y Axis [degrees] : 1.0521

Maximum Vdifference - X Axis [V] : 158.4200

Maximum Vdifference - Y Axis [V] : 157.4000

Driver Bias Voltage (Vbias) [V] : 80

Maximum Mech. Angle - Coupled Axes [degrees] : 1.2669

Resonant Frequency - X Axis [Hz] : 1393

Resonant Frequency - Y Axis [Hz] : 1398

Quality Factor - X Axis : 70.3000

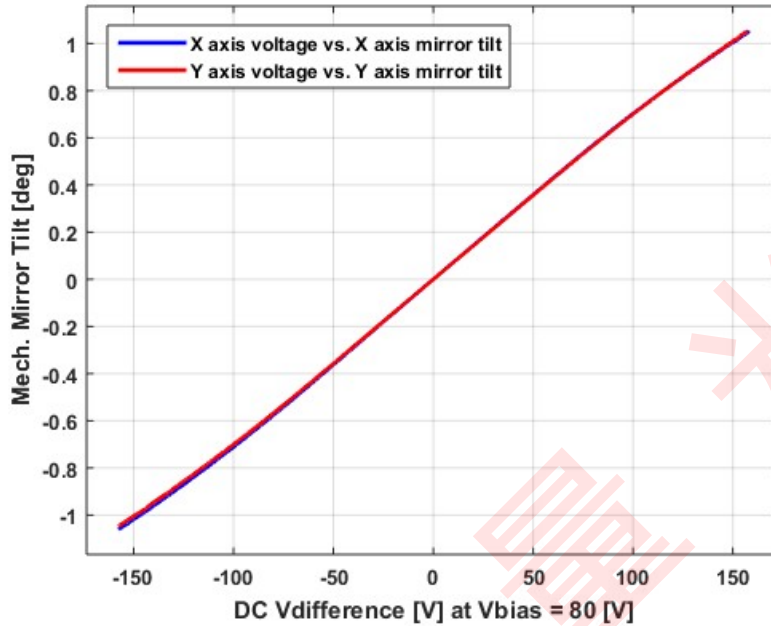
Quality Factor - Y Axis : 73.6000

Recommended LPF Cutoff Frequency (6th Order Bessel) [Hz] : 500

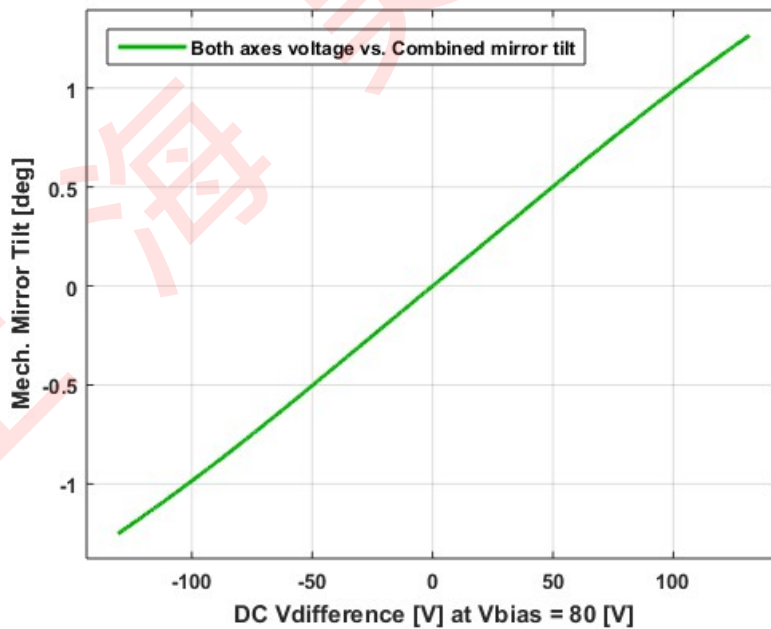
Date and Time Report was Created: 11-Jun-2018 at 13:46:13

Static Response

Voltage vs. Mech. Angle - Individual Axes

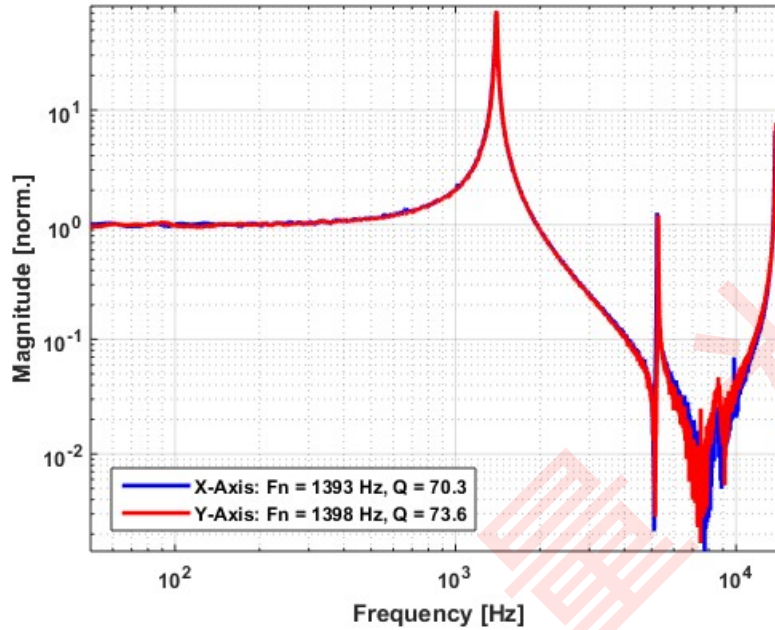


Voltage vs. Mech. Angle - Coupled Axes

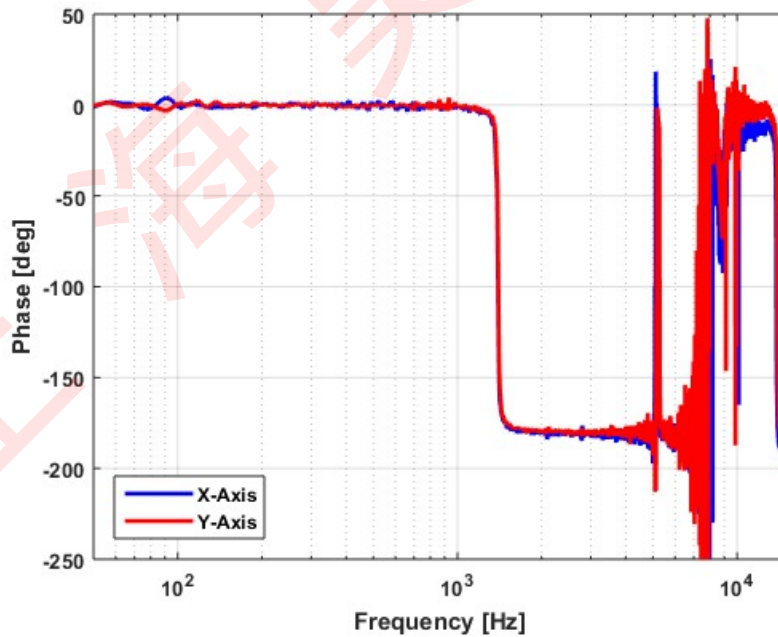


Frequency Response

Small Signal Frequency Response - Magnitude

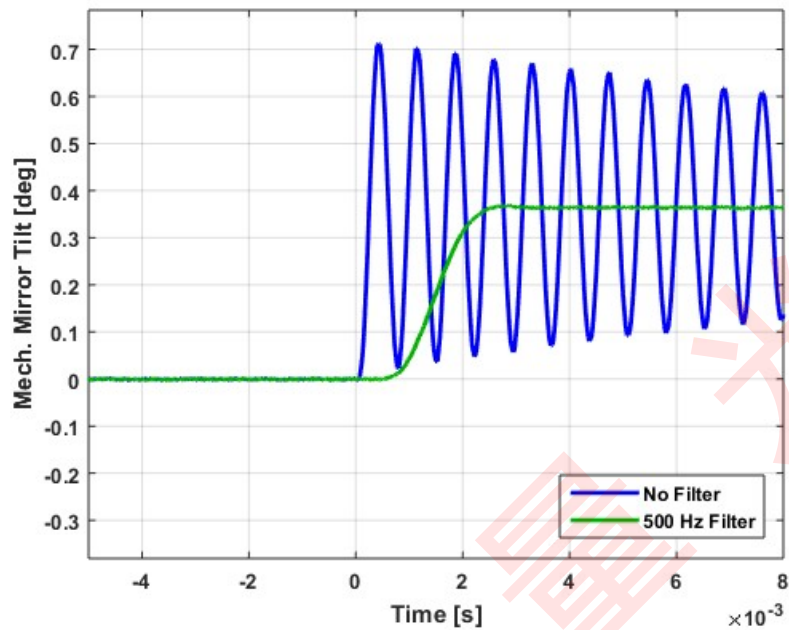


Small Signal Frequency Response - Phase

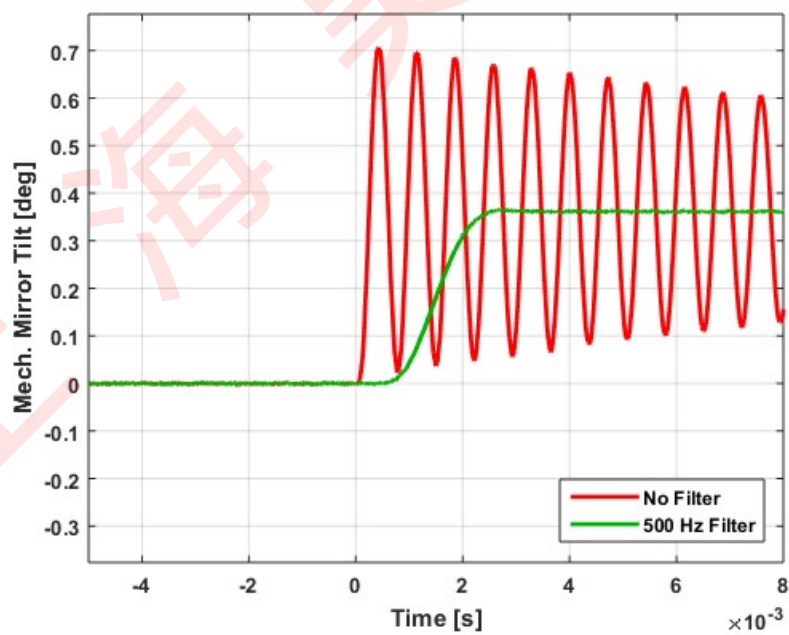


Step Response

X-Axis Step Response

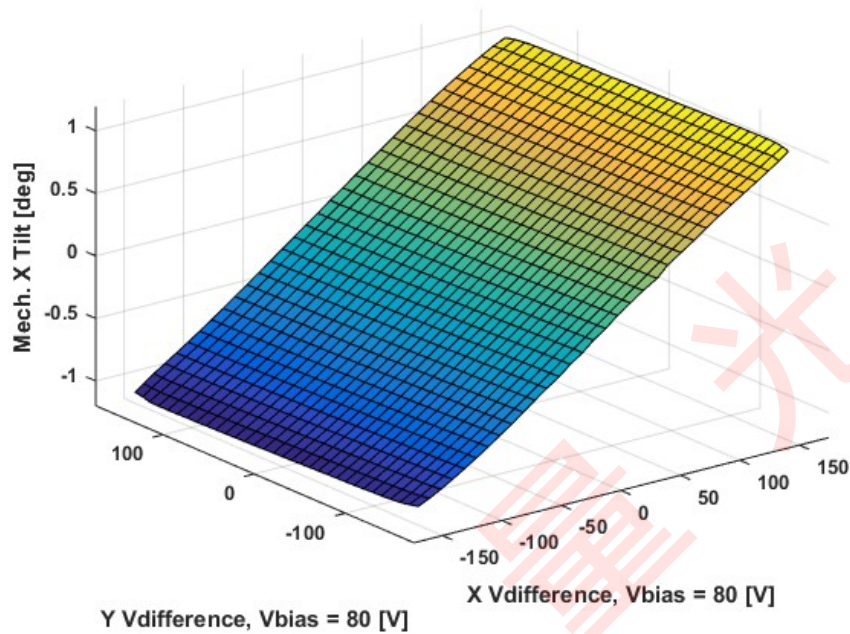


Y-Axis Step Response

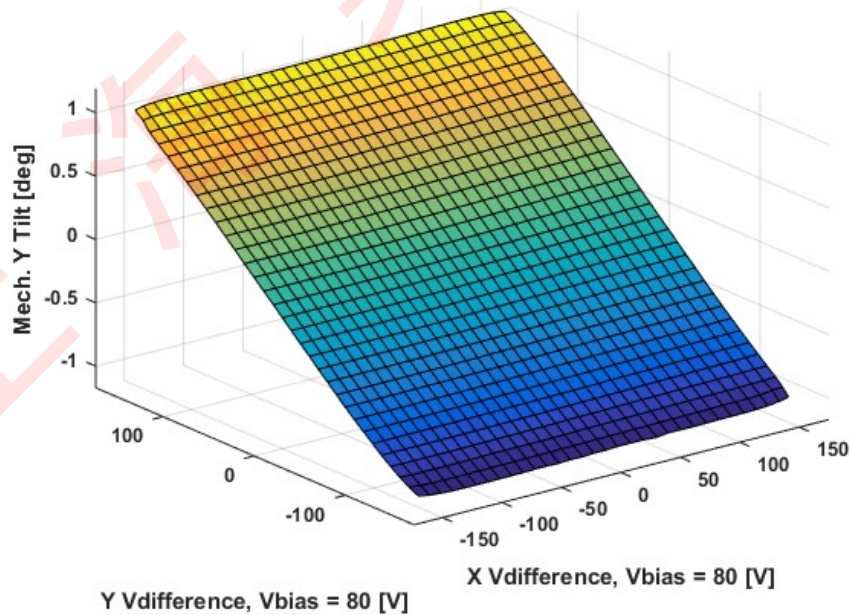


2D Lookup Tables

Voltage vs. X Mech. Angle - Lookup Table



Voltage vs. Y Mech. Angle - Lookup Table



Y vs. X Tilt - Addressable Mech. Angles

