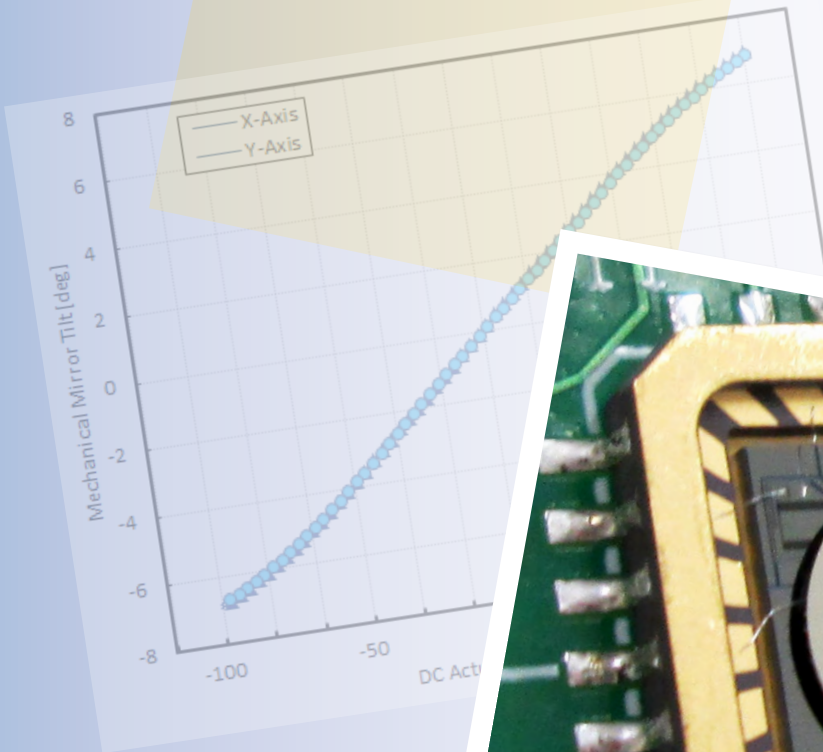




Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S68775



Device Parameters Summary

Device ID : S68775

Actuator Name: A7M20.2

Actuator Mode : Gimbal-less Dual-Axis Quasistatic

Mirror Type : Integrated

Mirror Size : 2000um diameter

Mirror Coating : Aluminum

Maximum Mech. Angle - X Axis [degrees] : 5.5696

Maximum Mech. Angle - Y Axis [degrees] : 5.5461

Maximum Vdifference - X Axis [V] : 176.2100

Maximum Vdifference - Y Axis [V] : 176.2400

Driver Bias Voltage (Vbias) [V] : 90

Maximum Mech. Angle - Coupled Axes [degrees] : 8.1865

Mech. Angle at 110V Vdifference - X Axis [degrees] : 5.4366

Mech. Angle at 110V Vdifference - Y Axis [degrees] : 5.4129

Resonant Frequency - X Axis [Hz] : 1379

Resonant Frequency - Y Axis [Hz] : 1379

Quality Factor - X Axis : 78

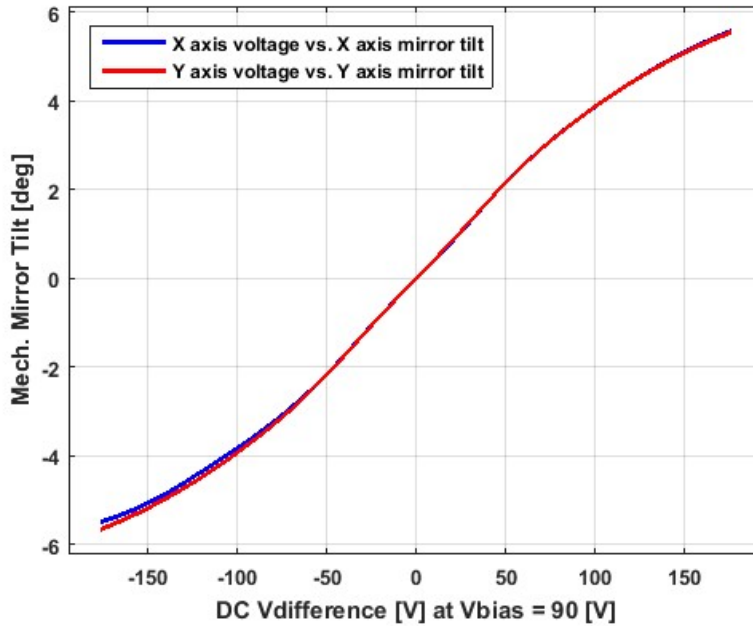
Quality Factor - Y Axis : 77.6000

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

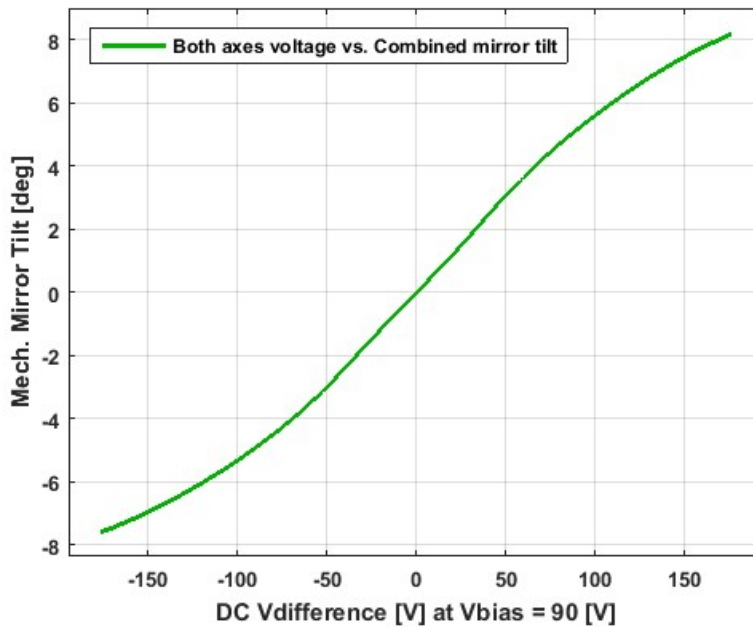
Date and Time Report was Created: 07-Jun-2022 at 14:56:31

Static Response

Voltage vs. Mech. Angle - Individual Axes

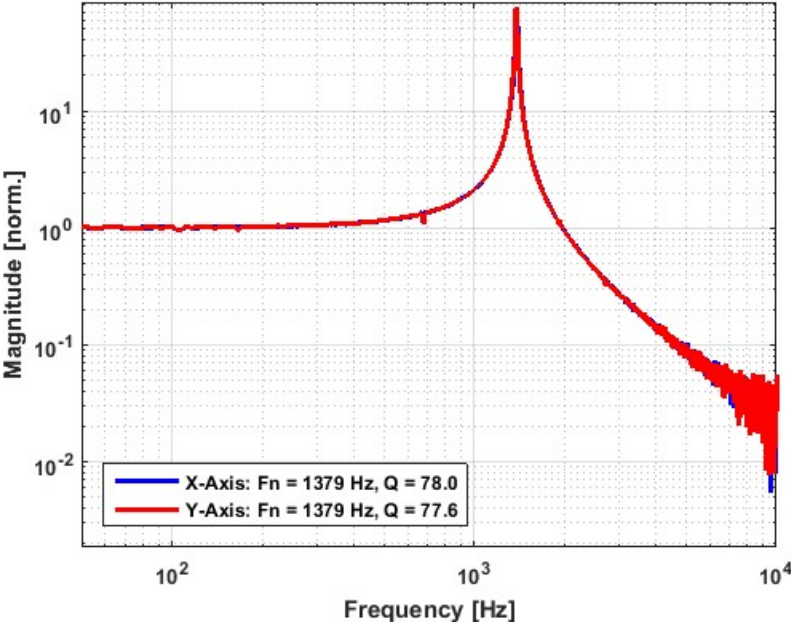


Voltage vs. Mech. Angle - Coupled Axes

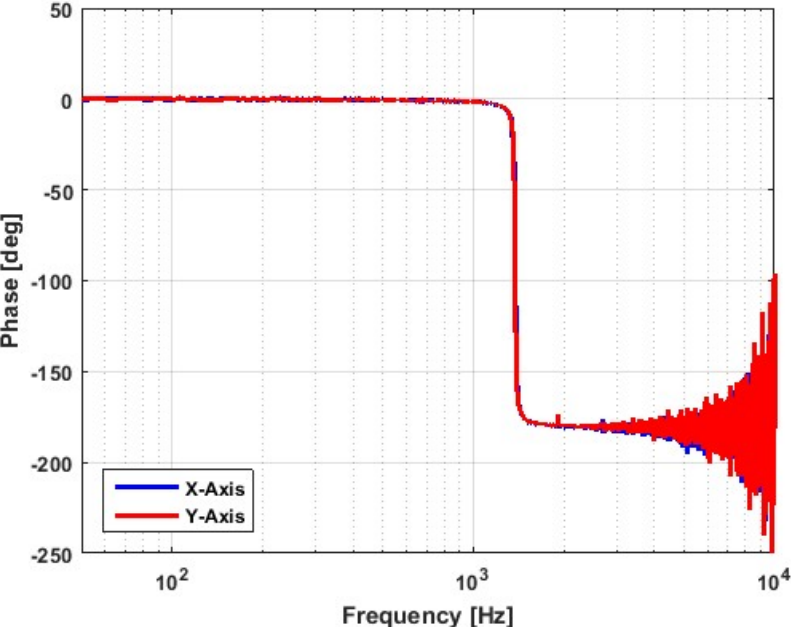


Frequency Response

Small Signal Frequency Response - Magnitude

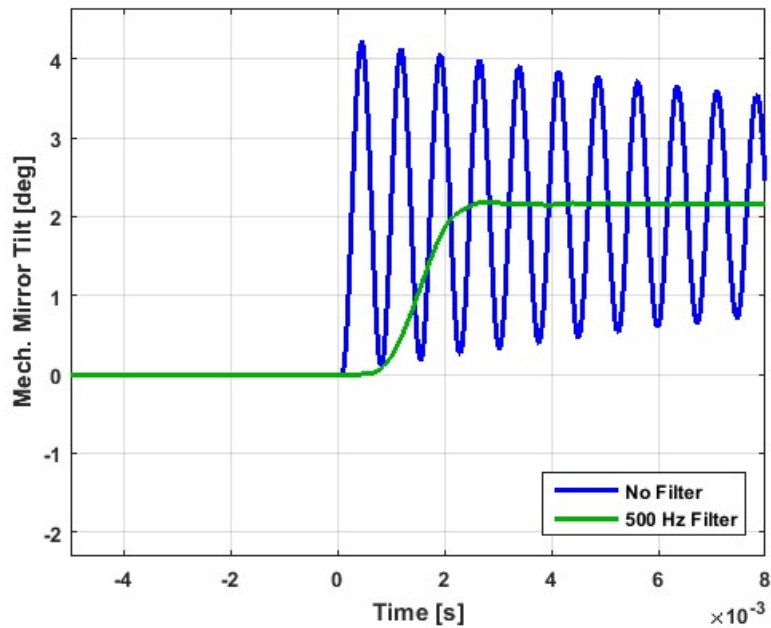


Small Signal Frequency Response - Phase

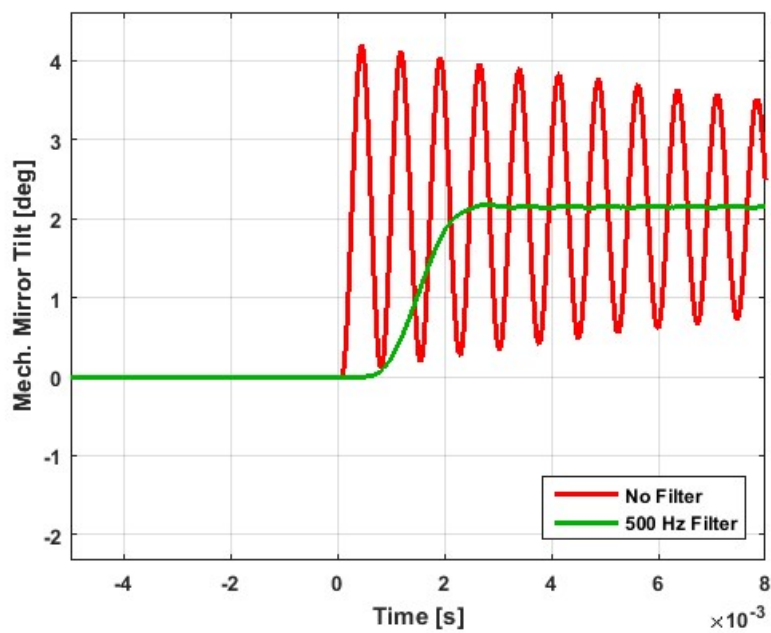


Step Response

X-Axis Step Response

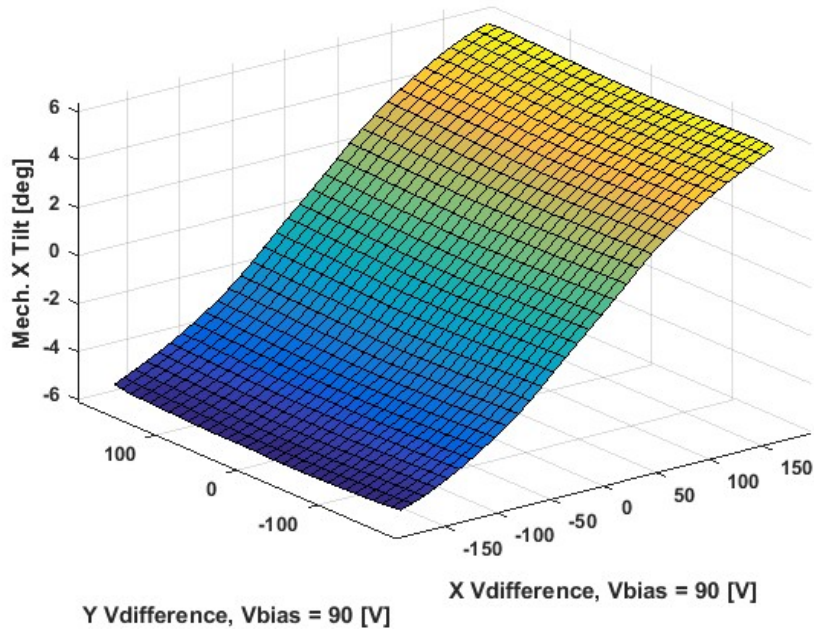


Y-Axis Step Response

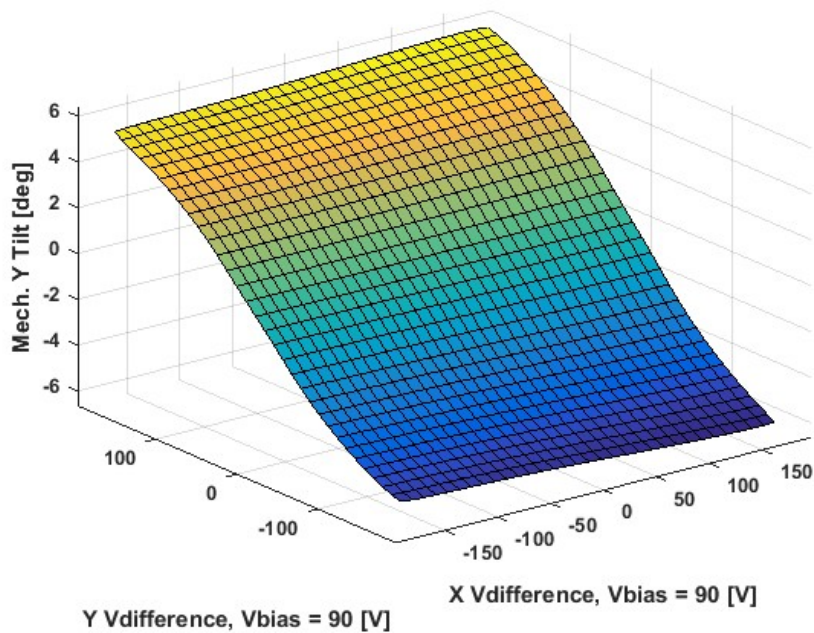


2D Lookup Tables

Voltage vs. X Mech. Angle - Lookup Table



Voltage vs. Y Mech. Angle - Lookup Table



Y vs. X Tilt - Addressable Mech. Angles

