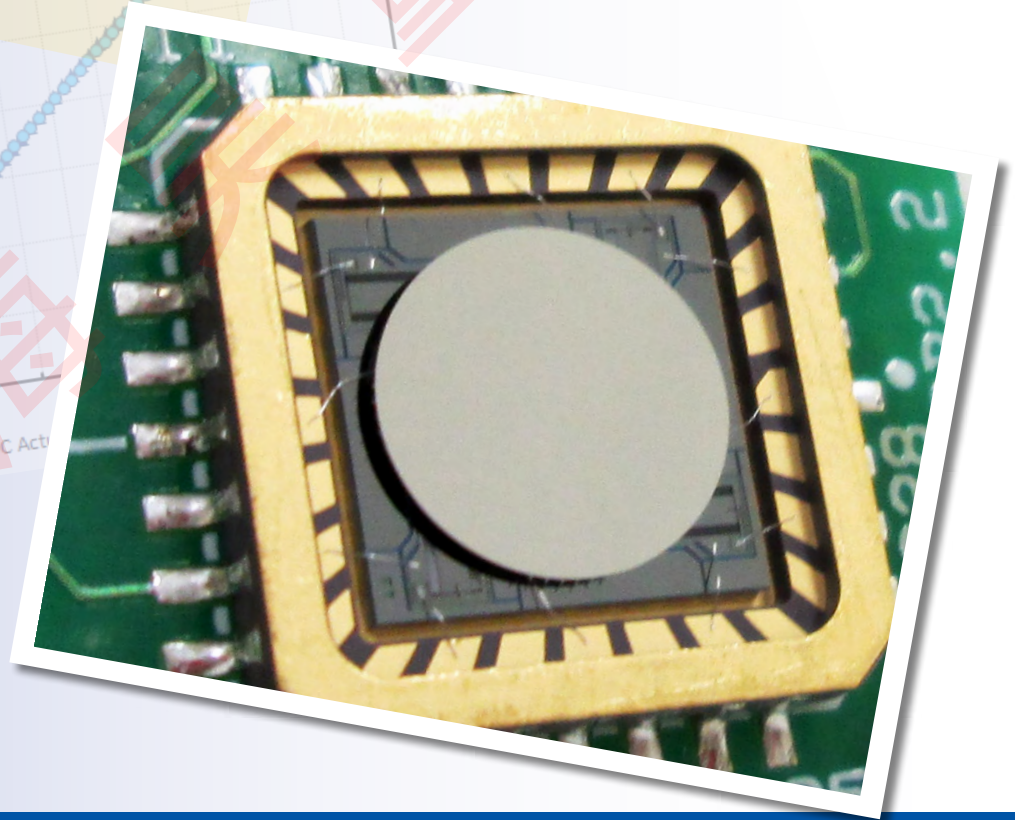
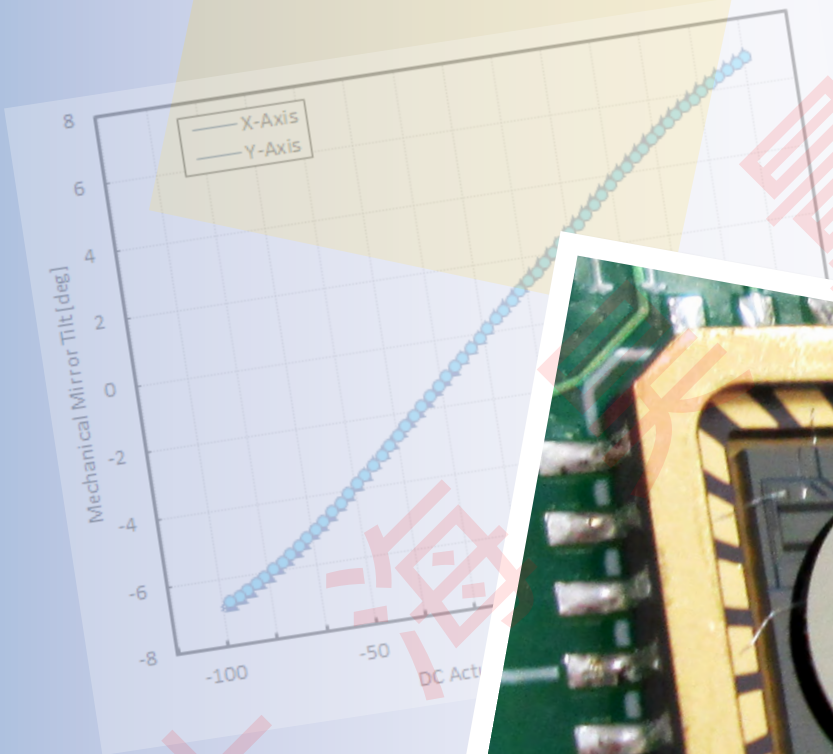


Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S44953_90V



Device Parameters Summary

Device ID : S44953_90V

Actuator Type: F1M16.1

Actuator Mode : Gimbal-less Dual-Axis Quasistatic

Mirror Type and Size : Integrated mirror 1.6mm diameter

Mirror Coating : Aluminum

Maximum Mech. Angle - X Axis [degrees] : 5.1600

Maximum Mech. Angle - Y Axis [degrees] : 5.2319

Maximum Vdifference - X Axis [V] : 164

Maximum Vdifference - Y Axis [V] : 164

Driver Bias Voltage (Vbias) [V] : 90

Maximum Mech. Angle - Coupled Axes [degrees] : 6.4902

Resonant Frequency - X Axis [Hz] : 1853

Resonant Frequency - Y Axis [Hz] : 1816

Quality Factor - X Axis : 15

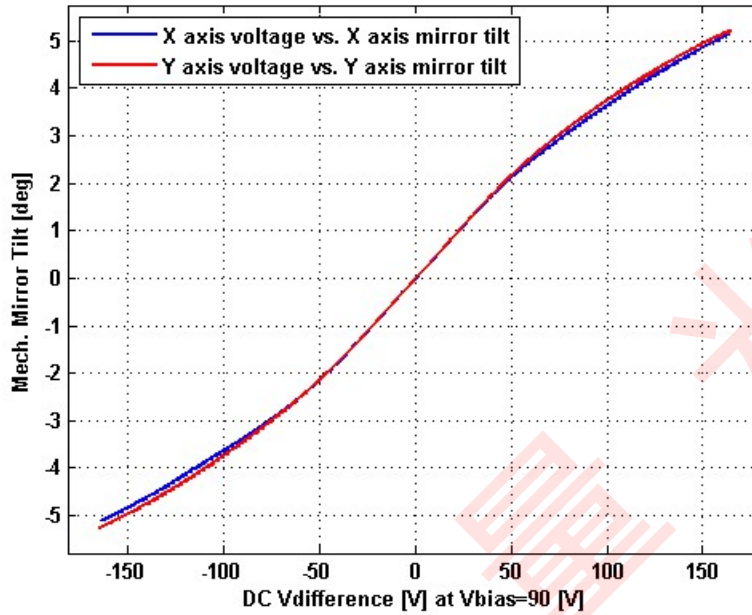
Quality Factor - Y Axis : 15

Recommended LPF Cutoff Frequency (6th Order Bessel) [Hz] : 900

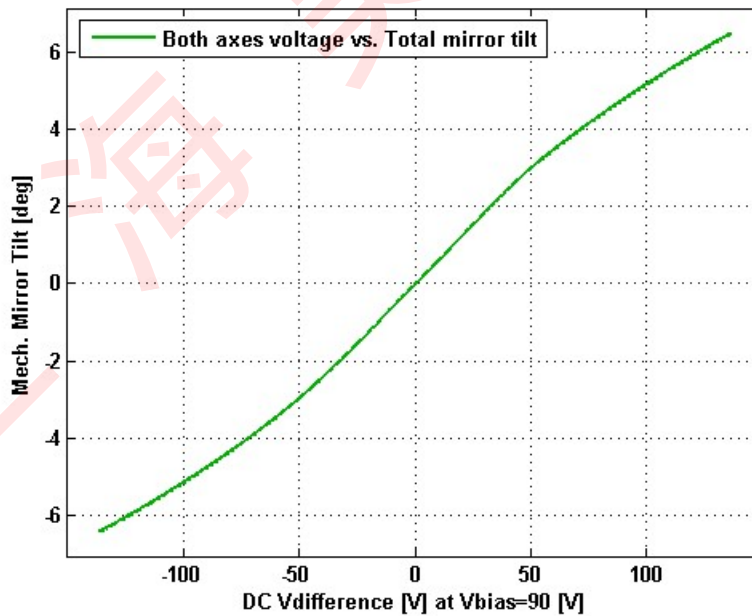
Date and Time Report was Created: 15-Mar-2019 at 15:56:42

Static Response

Voltage vs. Mech. Angle - Individual Axes

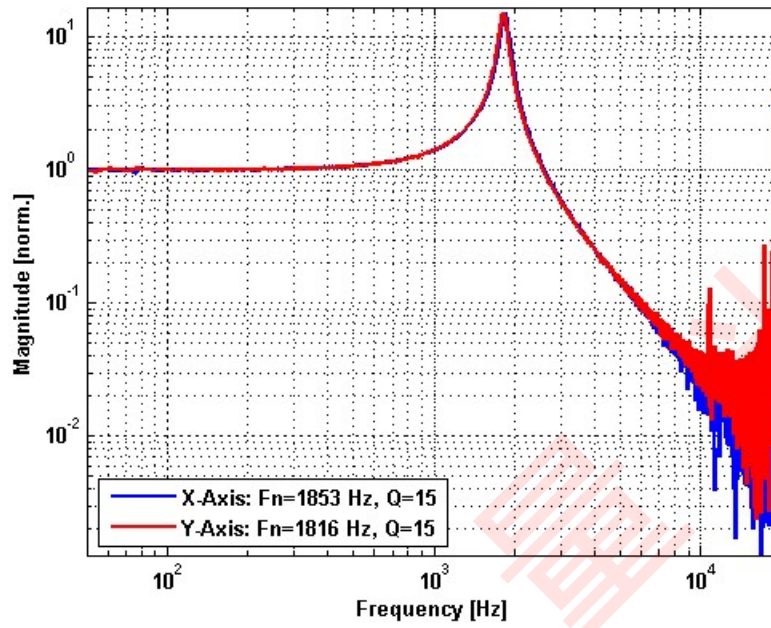


Voltage vs. Mech. Angle - Coupled Axes

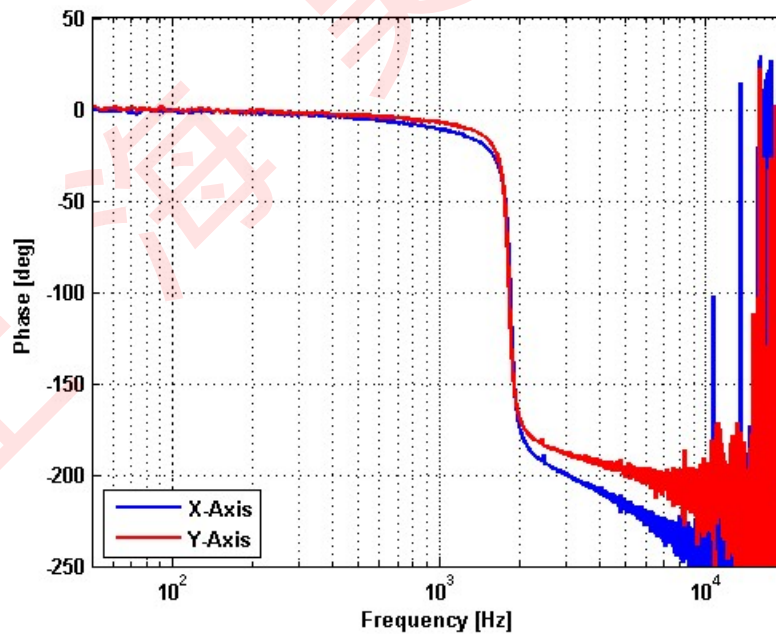


Frequency Response

Small Signal Frequency Response - Magnitude

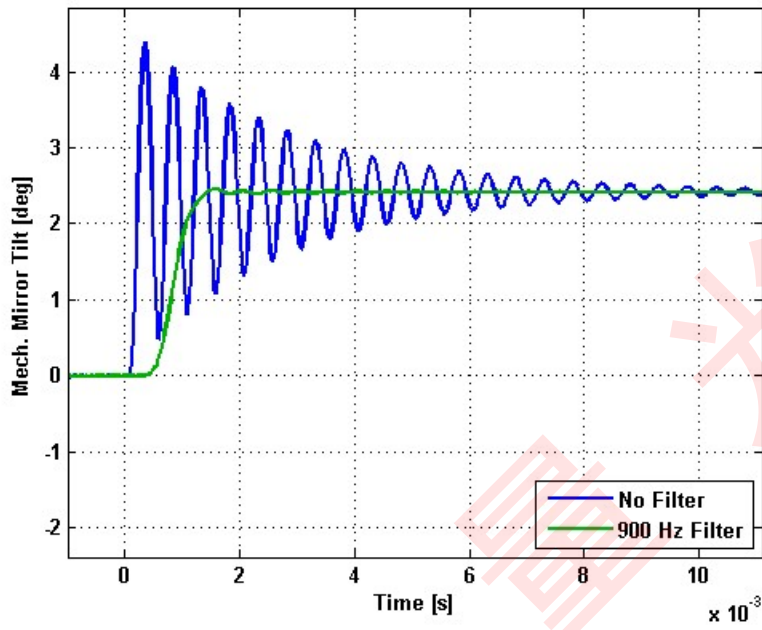


Small Signal Frequency Response - Phase

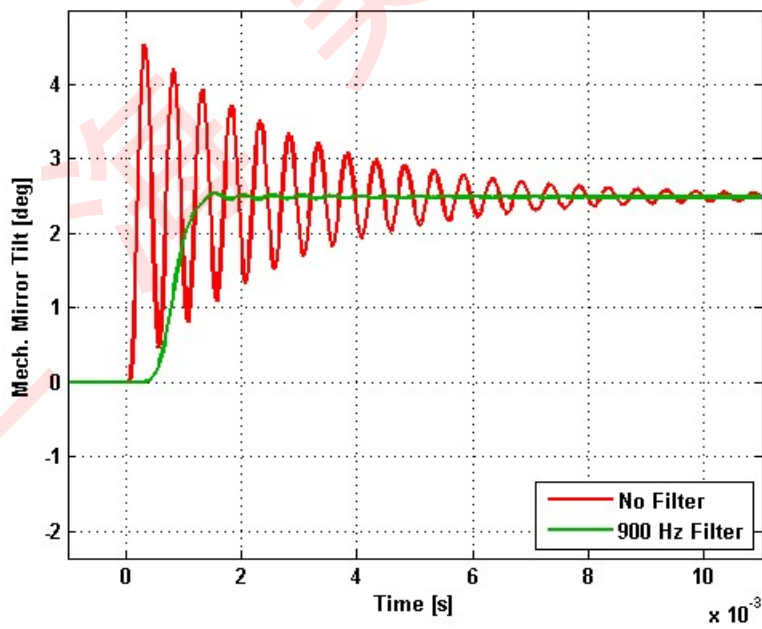


Step Response

X-Axis Step Response

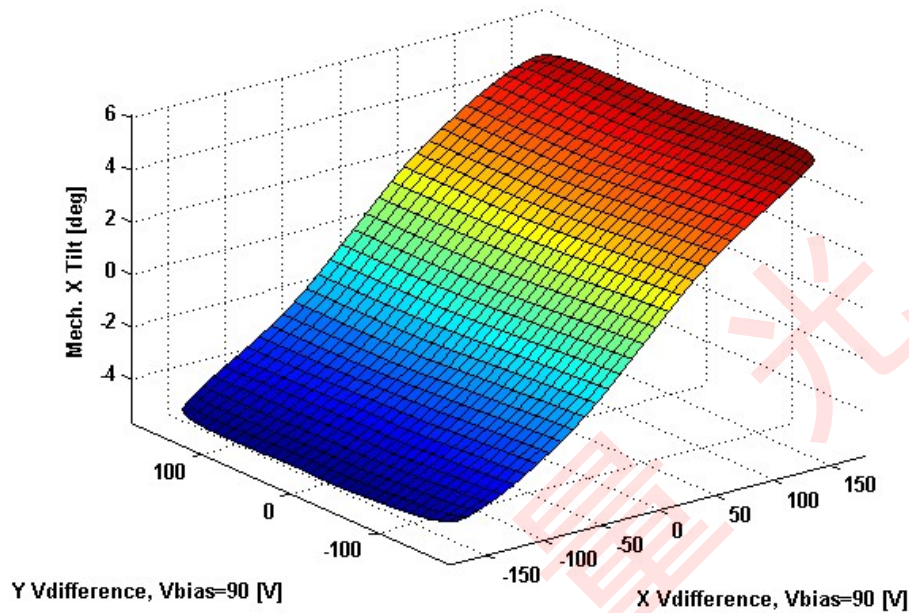


Y-Axis Step Response

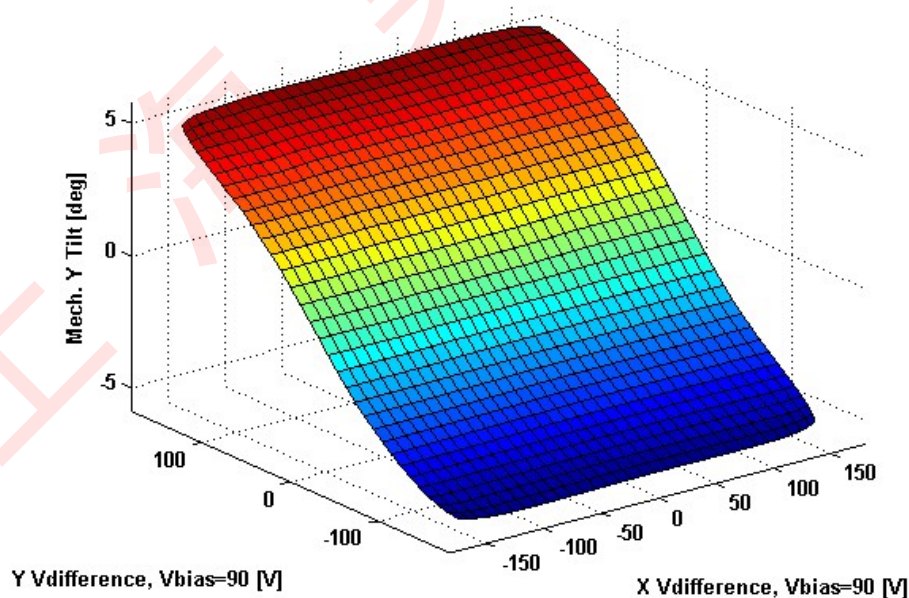


2D Lookup Tables

Voltage vs. X Mech. Angle - Lookup Table



Voltage vs. Y Mech. Angle - Lookup Table



Y vs. X Tilt - Addressable Mech. Angles

