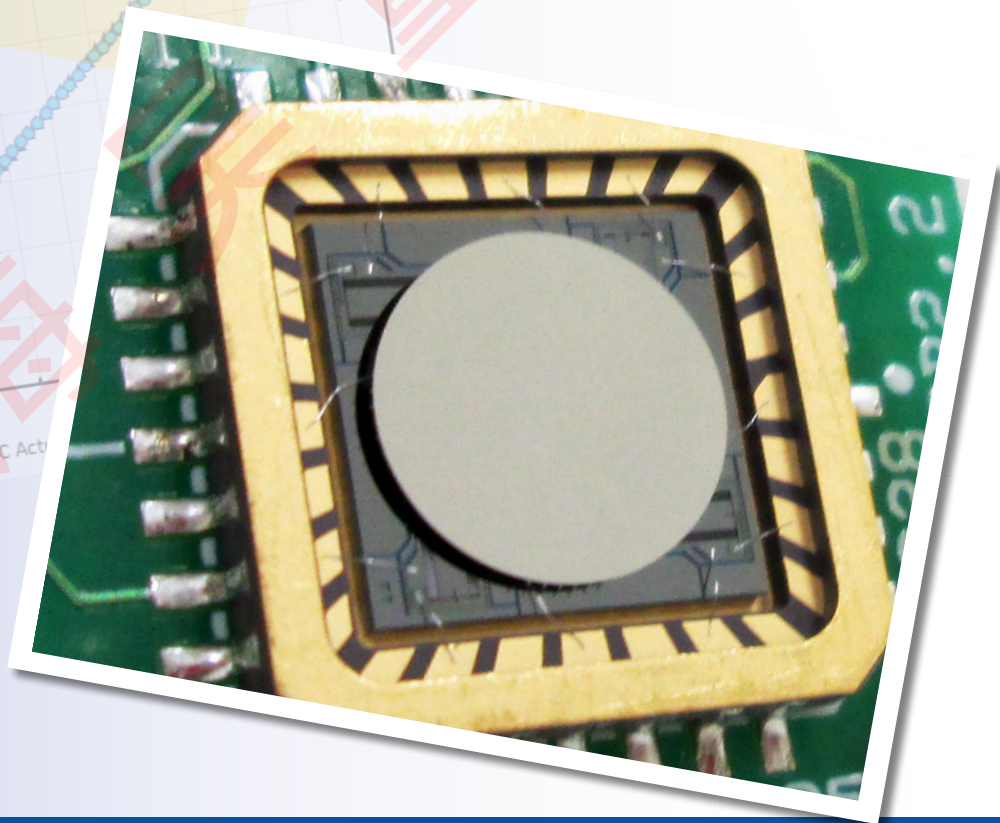
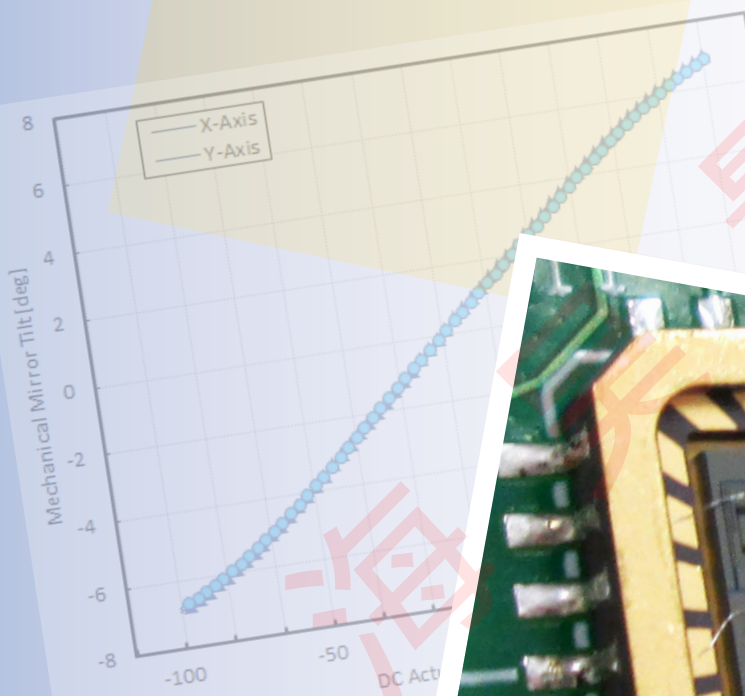


Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S7644



Device Parameters Summary

Device ID : S7644

Actuator Type: A3I8.2

Actuator Mode : Gimbal-less Dual-Axis Quasistatic

Mirror Type and Size : Integrated mirror of 800um diameter

Mirror Coating : Aluminum

Maximum Mech. Angle - X Axis [degrees] : 6.1093

Maximum Mech. Angle - Y Axis [degrees] : 6.1661

Maximum Vdifference - X Axis [V] : 98

Maximum Vdifference - Y Axis [V] : 97

Driver Bias Voltage (Vbias) [V] : 80

Maximum Mech. Angle - Coupled Axes [degrees] : 7.8375

Resonant Frequency - X Axis [Hz] : 3916

Resonant Frequency - Y Axis [Hz] : 3828

Quality Factor - X Axis : 53

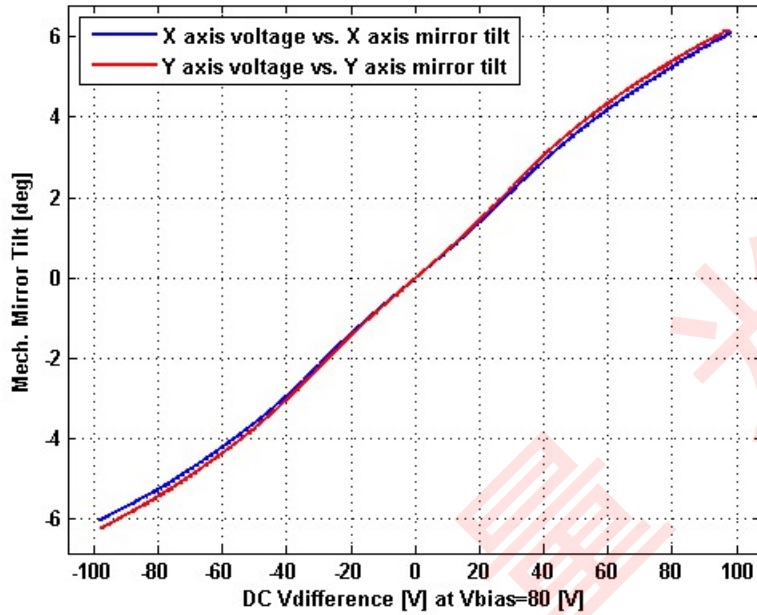
Quality Factor - Y Axis : 50

Recommended LPF Cutoff Frequency (6th Order Bessel) [Hz] : 1000

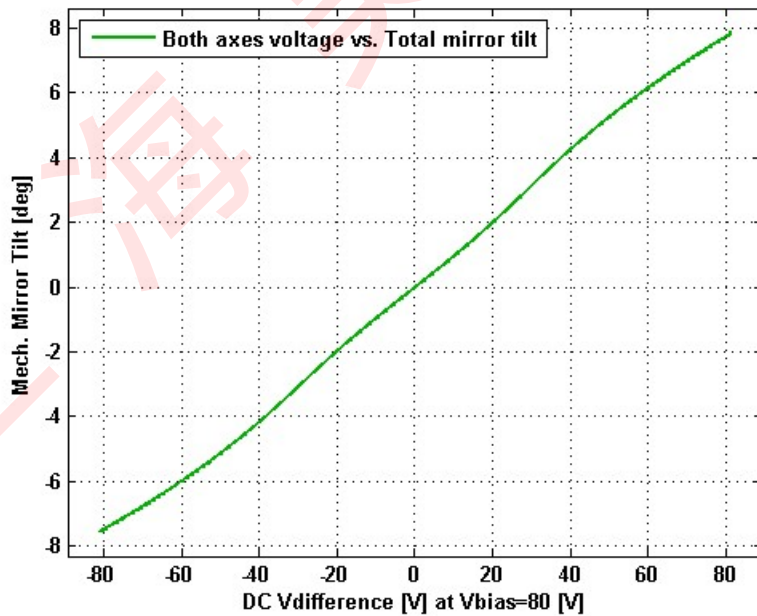
Date and Time Report was Created: 02-Feb-2018 at 12:30:26

Static Response

Voltage vs. Mech. Angle - Individual Axes

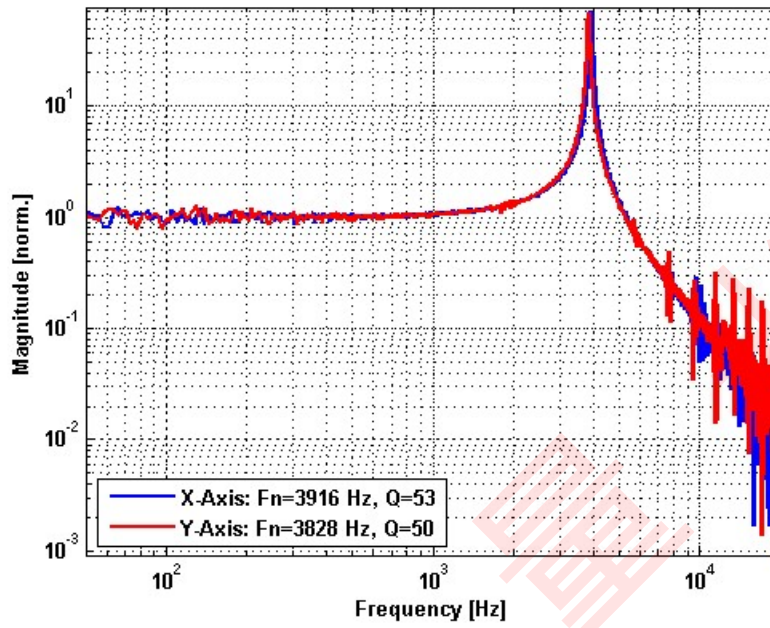


Voltage vs. Mech. Angle - Coupled Axes

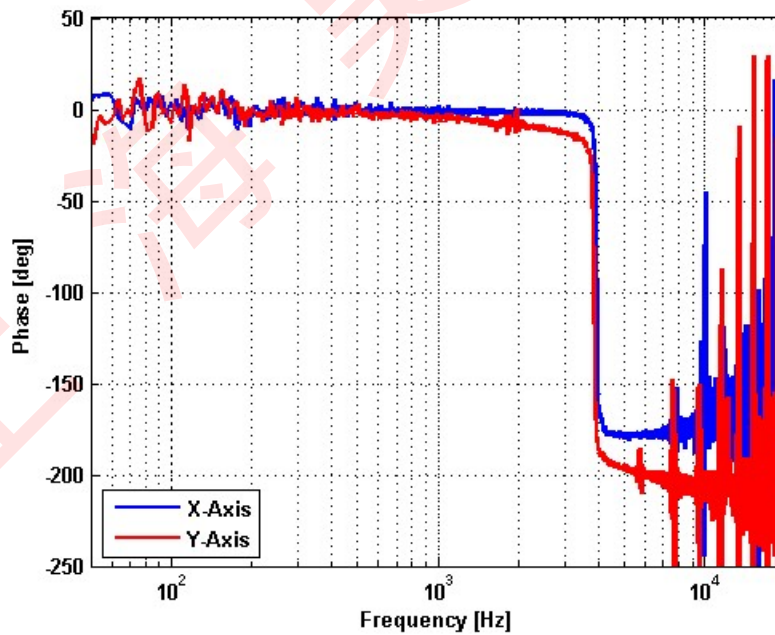


Frequency Response

Small Signal Frequency Response - Magnitude

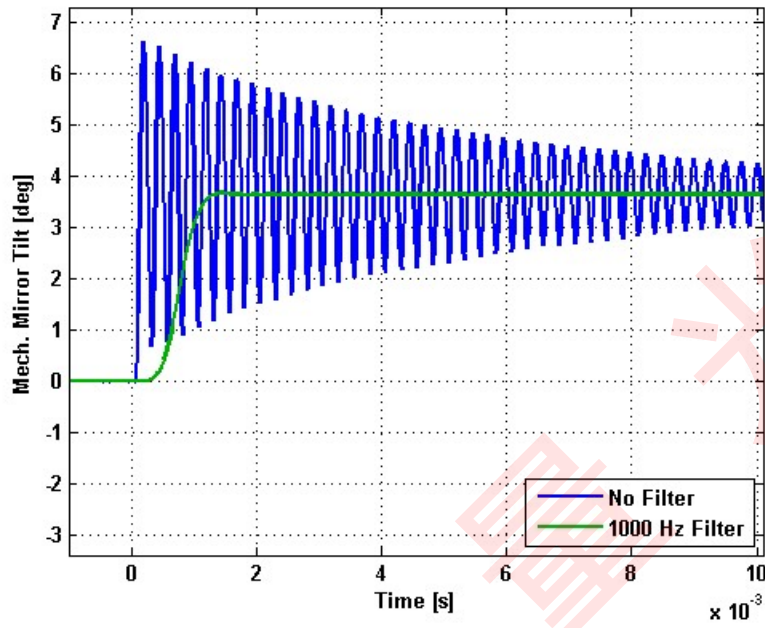


Small Signal Frequency Response - Phase

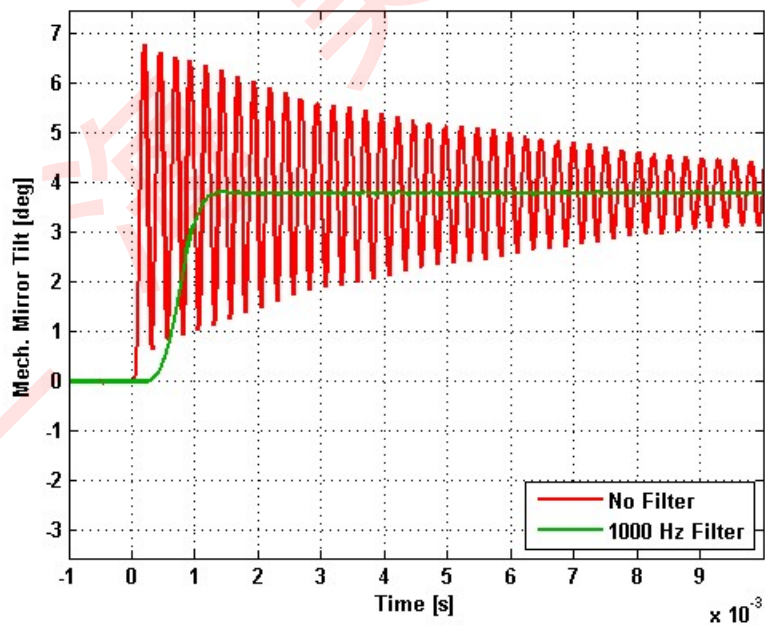


Step Response

X-Axis Step Response

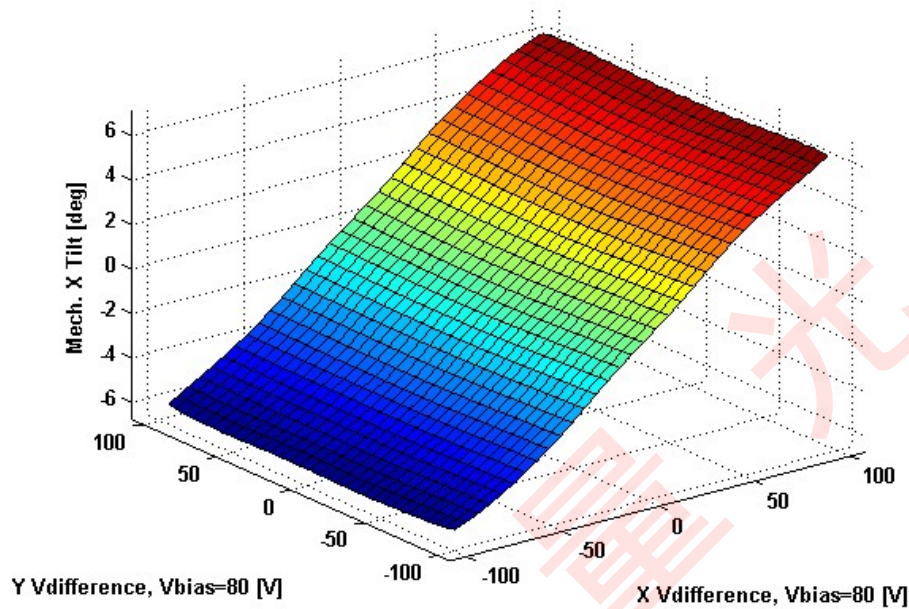


Y-Axis Step Response

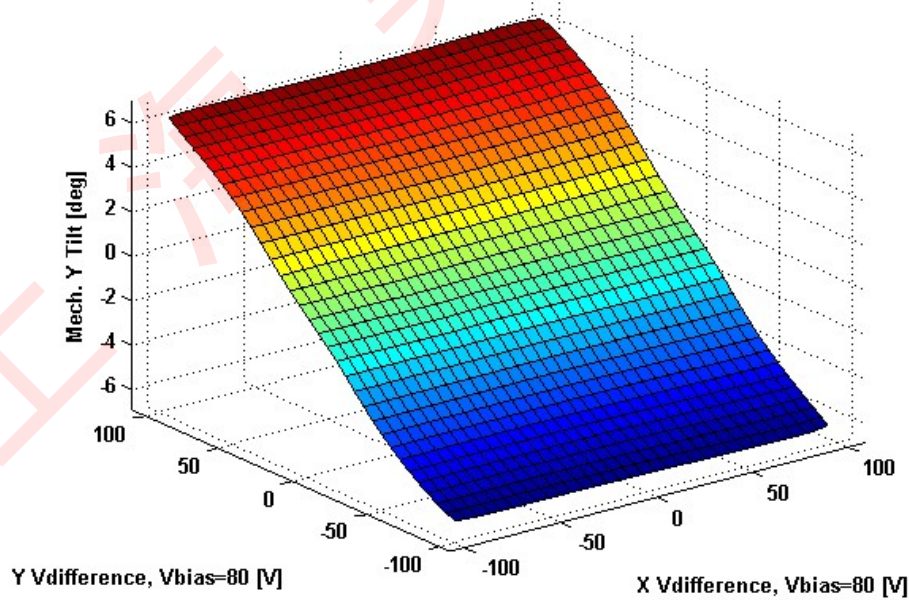


2D Lookup Tables

Voltage vs. X Mech. Angle - Lookup Table



Voltage vs. Y Mech. Angle - Lookup Table



Y vs. X Tilt - Addressable Mech. Angles

