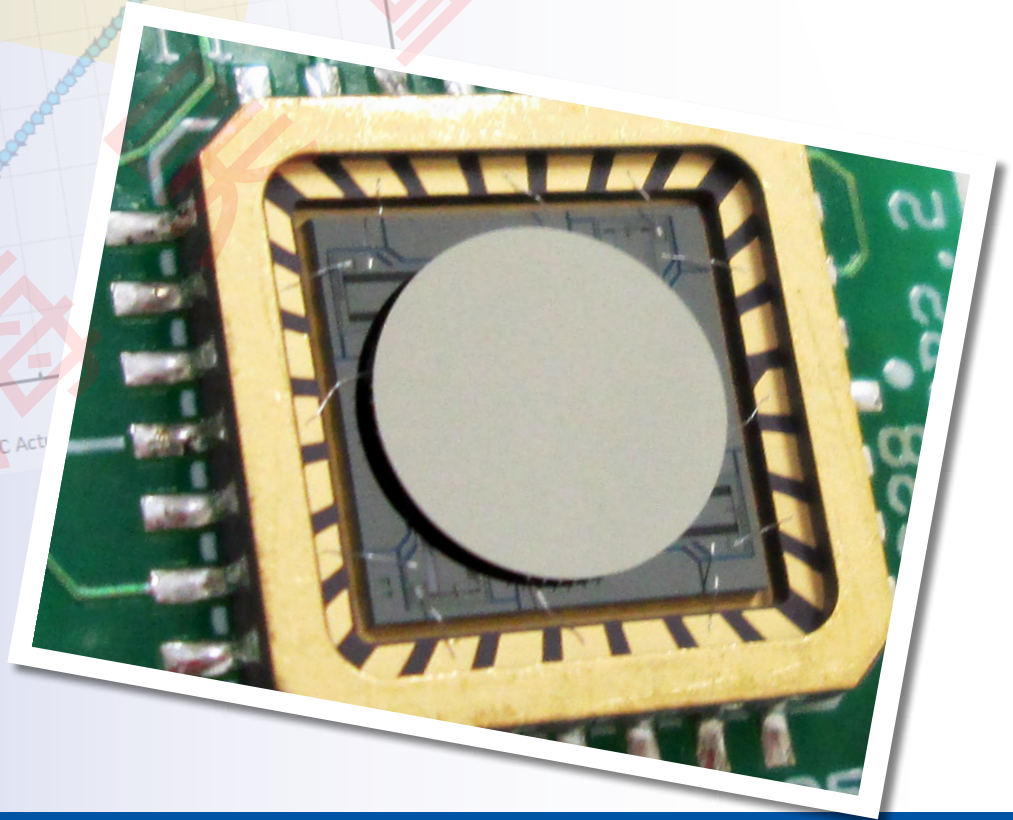
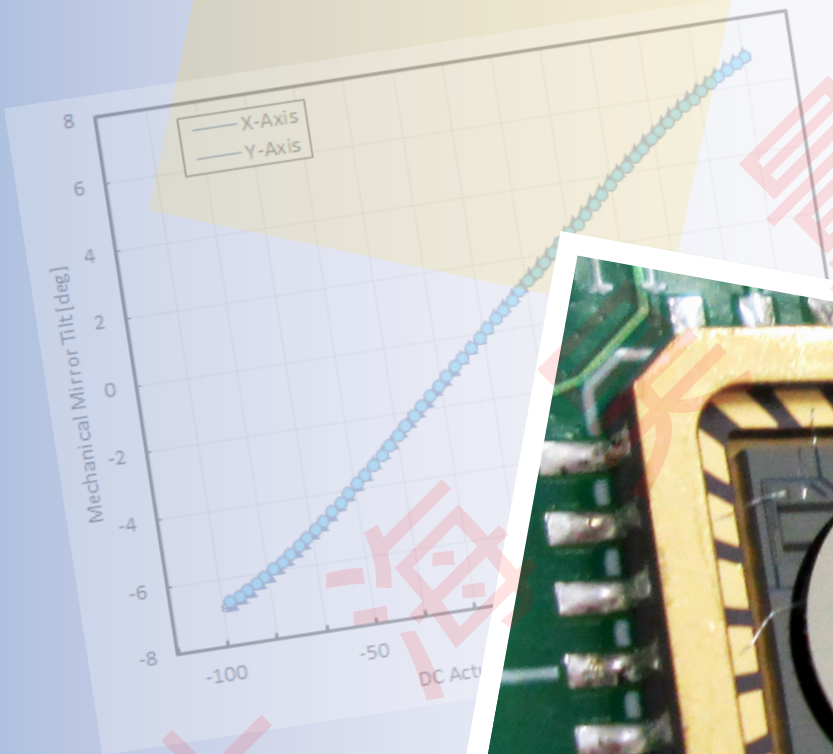


Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S31191



Device Parameters Summary

Device ID : S31191

Actuator Type: A7M20.2

Actuator Mode : Gimbal-less Dual-Axis Quasistatic

Mirror Type and Size : Integrated mirror of 2000um diameter

Mirror Coating : Aluminum

Maximum Mech. Angle - X Axis [degrees] : 4.9996

Maximum Mech. Angle - Y Axis [degrees] : 5.1014

Maximum Vdifference - X Axis [V] : 160

Maximum Vdifference - Y Axis [V] : 159

Driver Bias Voltage (Vbias) [V] : 80

Maximum Mech. Angle - Coupled Axes [degrees] : 6.3902

Resonant Frequency - X Axis [Hz] : 1340

Resonant Frequency - Y Axis [Hz] : 1331

Quality Factor - X Axis : 77

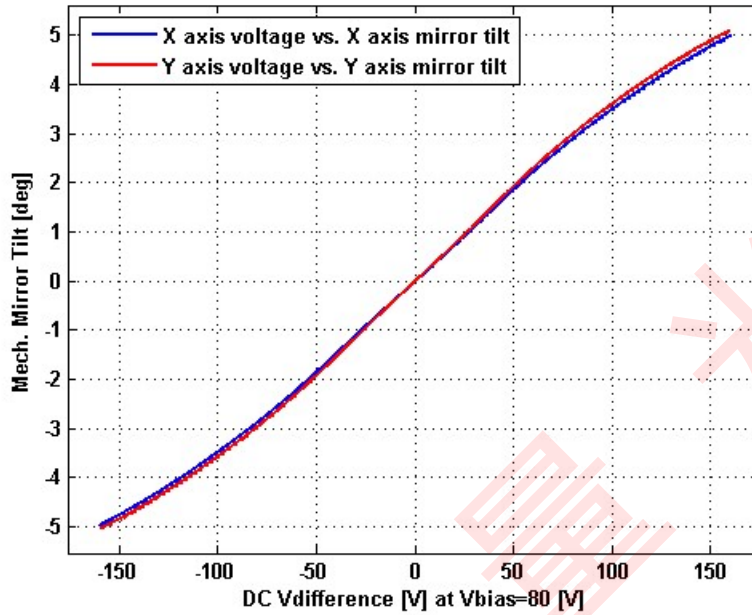
Quality Factor - Y Axis : 76

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

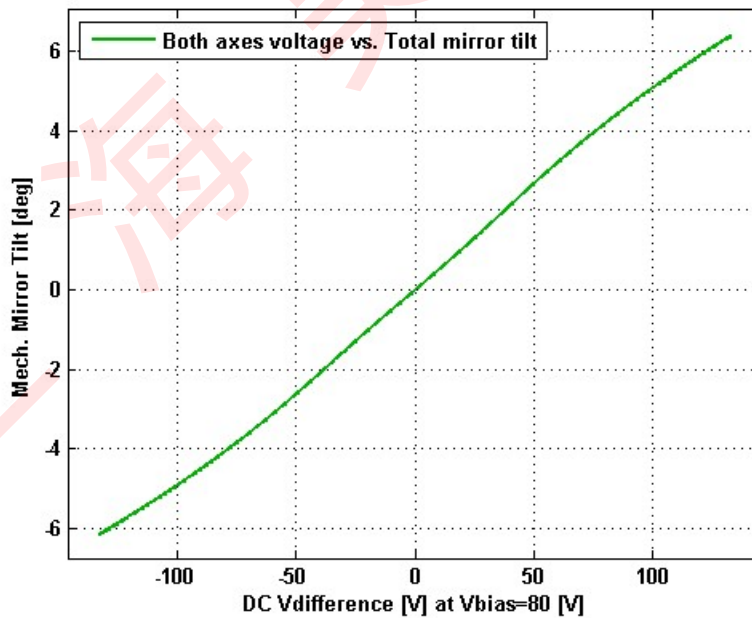
Date and Time Report was Created: 03-Jun-2019 at 11:31:47

Static Response

Voltage vs. Mech. Angle - Individual Axes

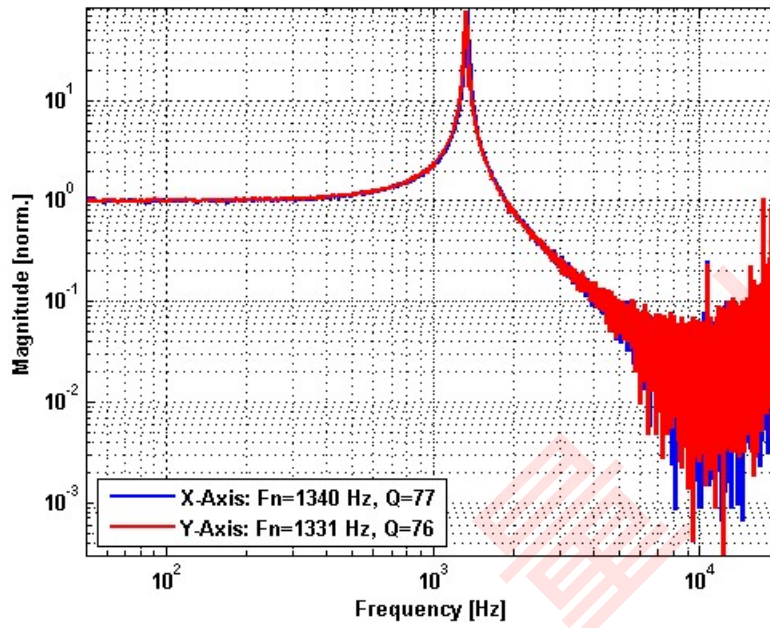


Voltage vs. Mech. Angle - Coupled Axes

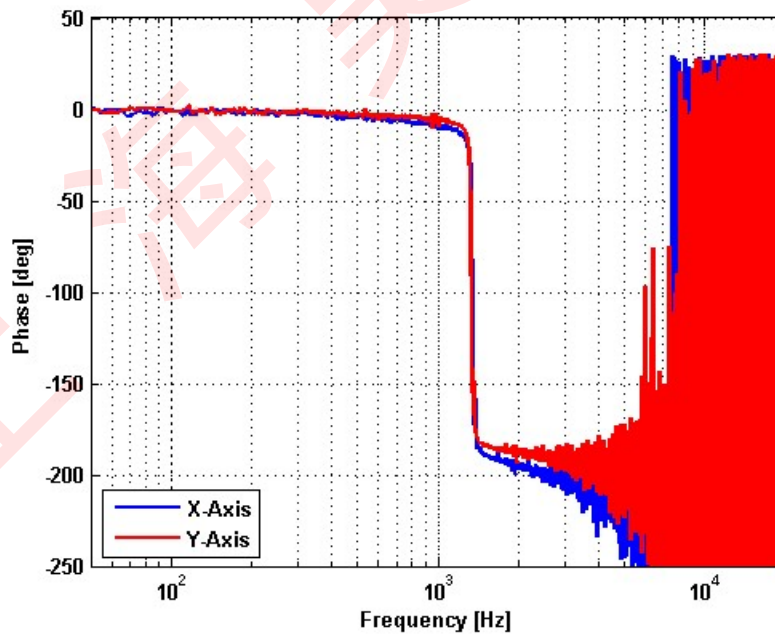


Frequency Response

Small Signal Frequency Response - Magnitude

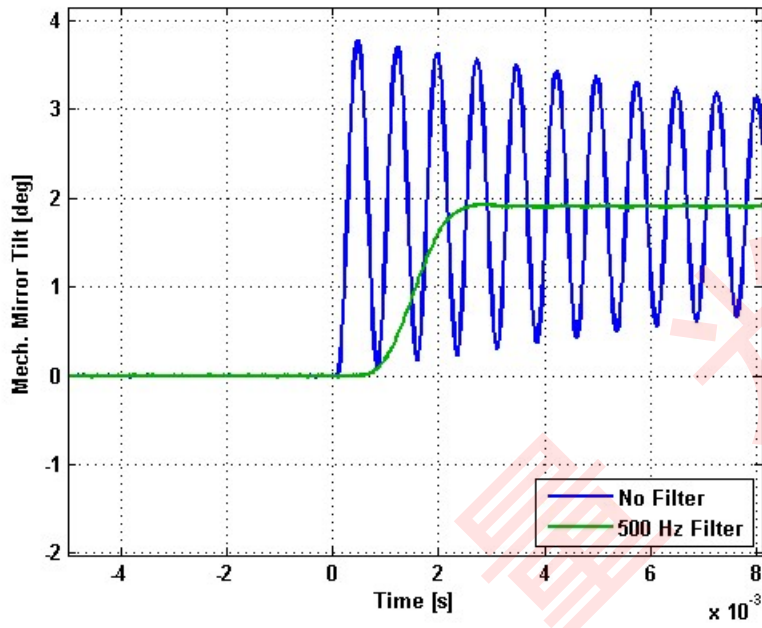


Small Signal Frequency Response - Phase

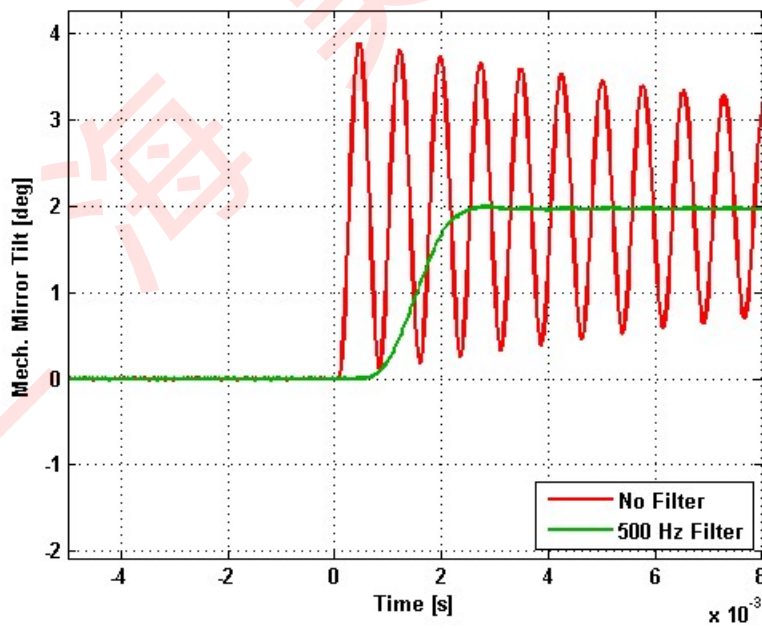


Step Response

X-Axis Step Response

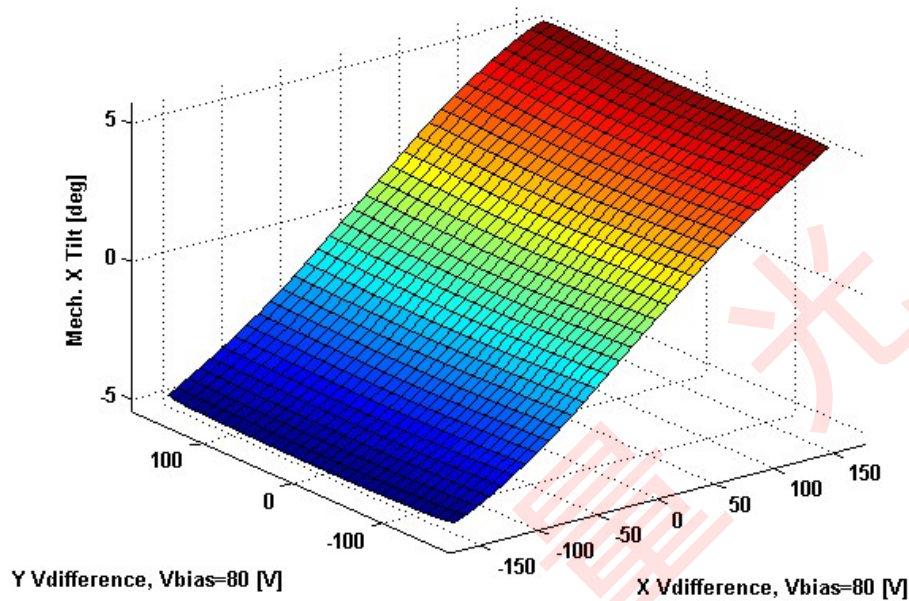


Y-Axis Step Response

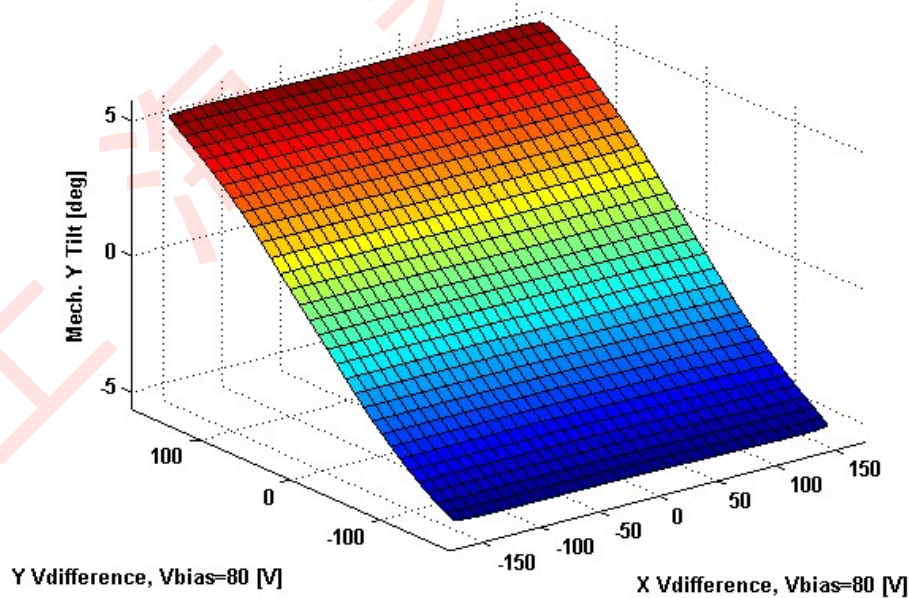


2D Lookup Tables

Voltage vs. X Mech. Angle - Lookup Table



Voltage vs. Y Mech. Angle - Lookup Table



Y vs. X Tilt - Addressable Mech. Angles

