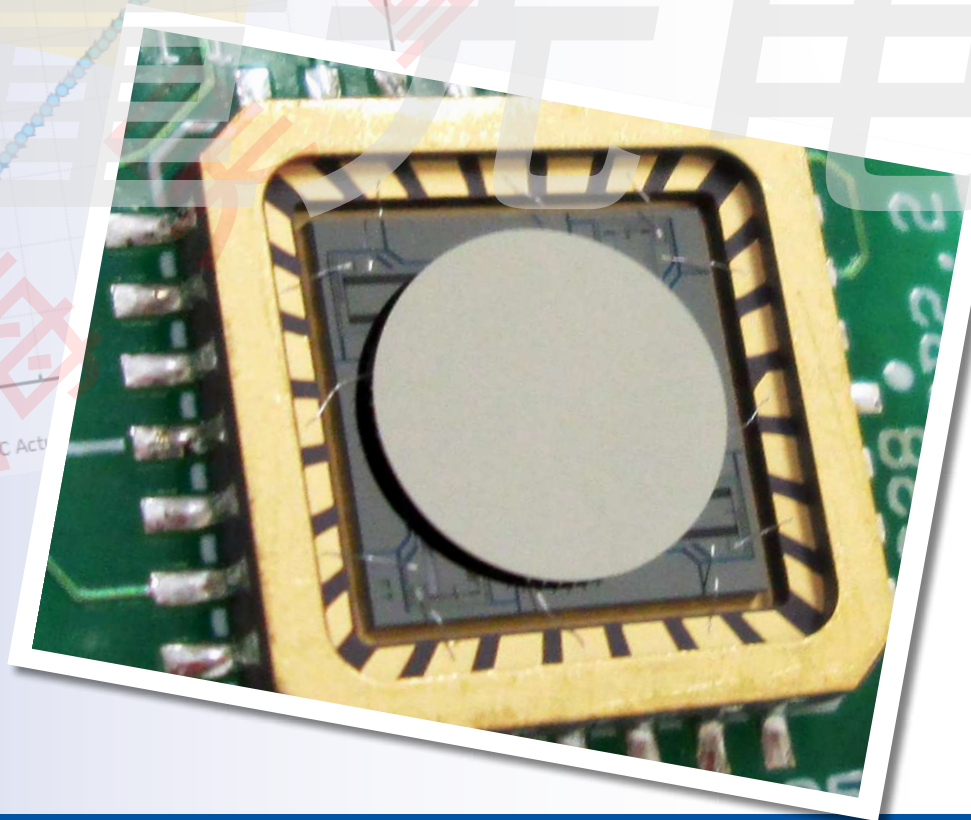
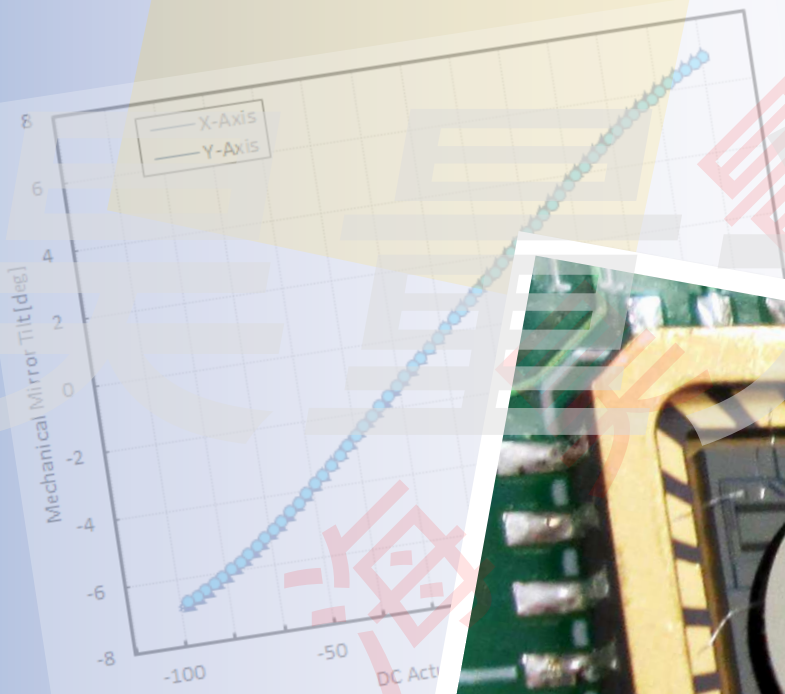


Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S5503



www.auniontech.com

Device Parameters Summary

Device ID : S5503

Actuator Name : A3I12.2

Actuator Type : 4-Quadrant (Two-Axis, Bidirectional)

Mirror Type and Size : Integrated mirror of 1200um diameter

Mirror Coating : Aluminum

Maximum Angle - X Axis [degrees] : 5.1700

Maximum Angle - Y Axis [degrees] : 5.1020

Maximum Voltage - X Axis [V] : 145

Maximum Voltage - Y Axis [V] : 144

Bias Voltage [V] : 80

Maximum Angle - Coupled Axes [degrees] : 6.7734

Resonant Frequency - X Axis [Hz] : 2607

Resonant Frequency - Y Axis [Hz] : 2627

Quality Factor- X Axis : 64

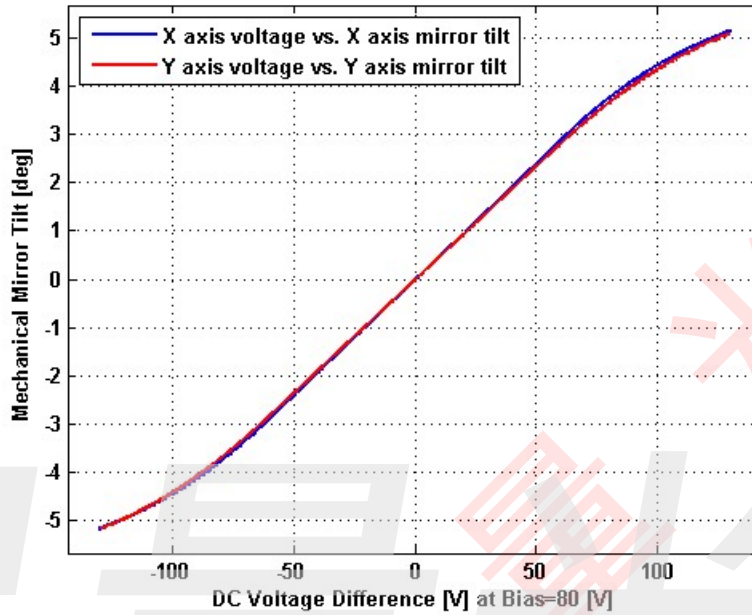
Quality Factor - Y Axis : 56

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

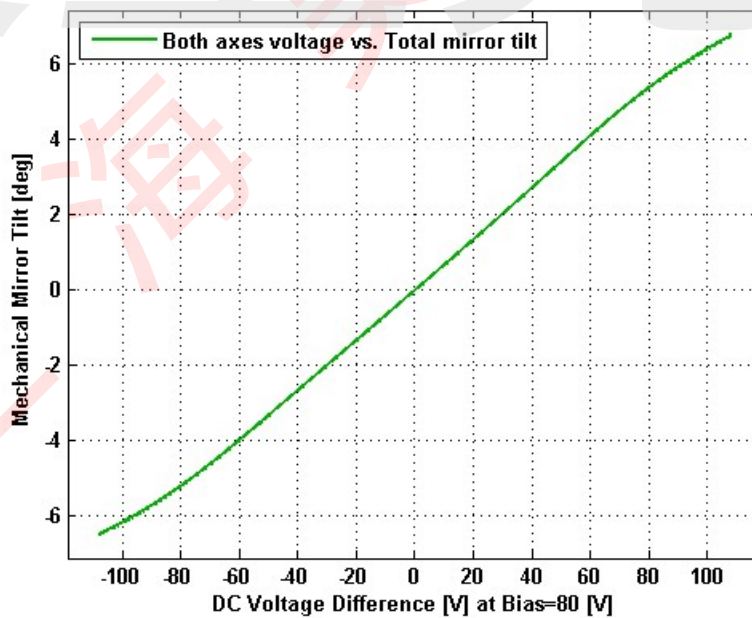
Date and Time Report was Created: 15-Apr-2016 at 11:40:19

Static Response

Voltage vs. Angle - Individual Axes

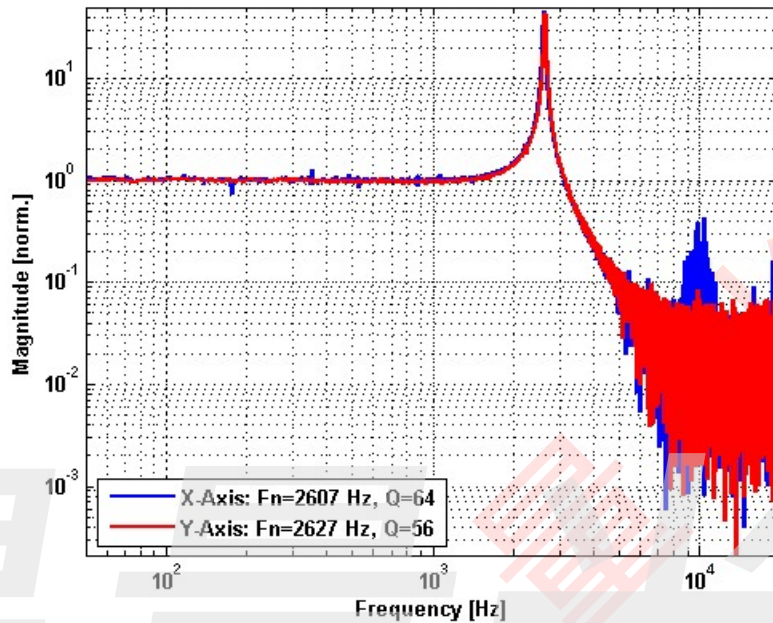


Voltage vs. Angle - Coupled Axes

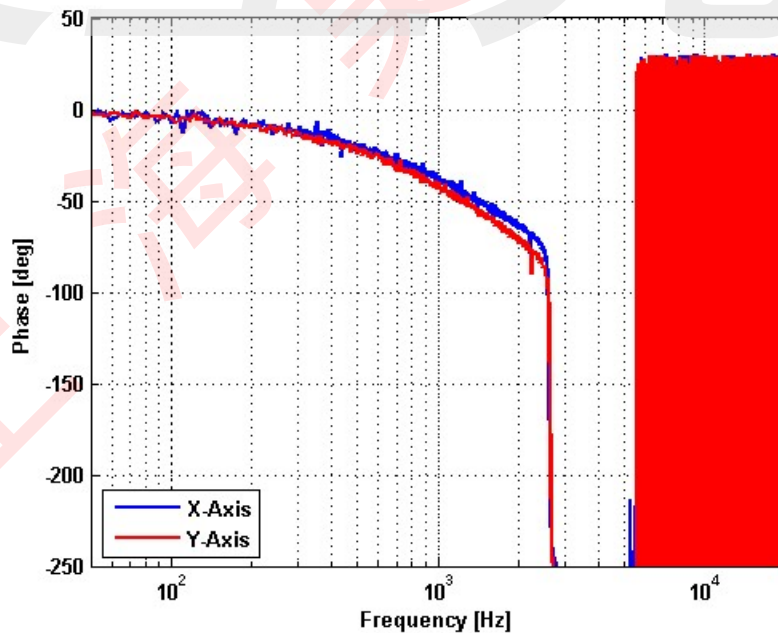


Frequency Response

Small Signal Frequency Response - Magnitude

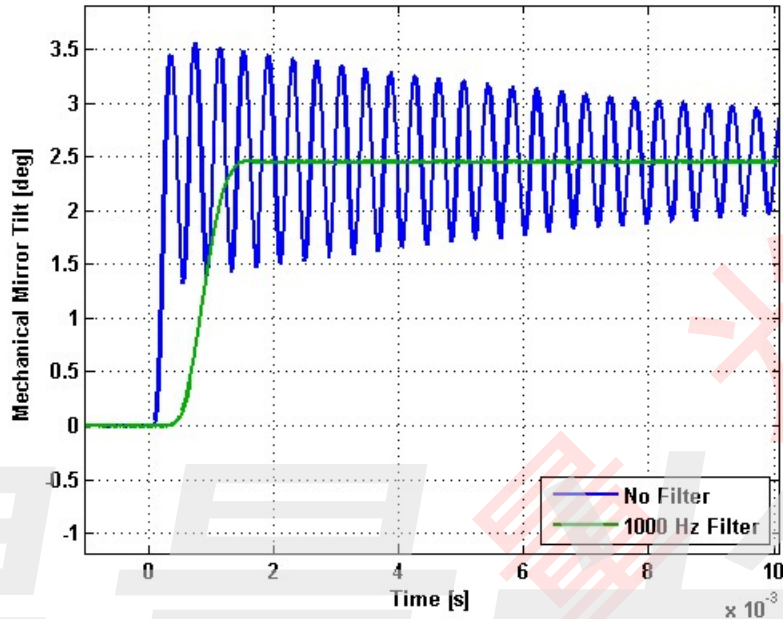


Small Signal Frequency Response - Phase

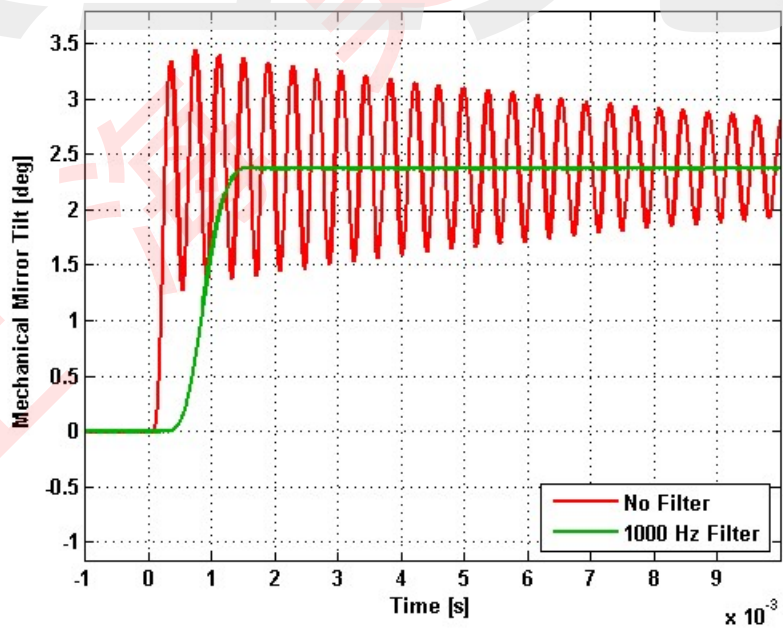


Step Response

X-Axis Step Response

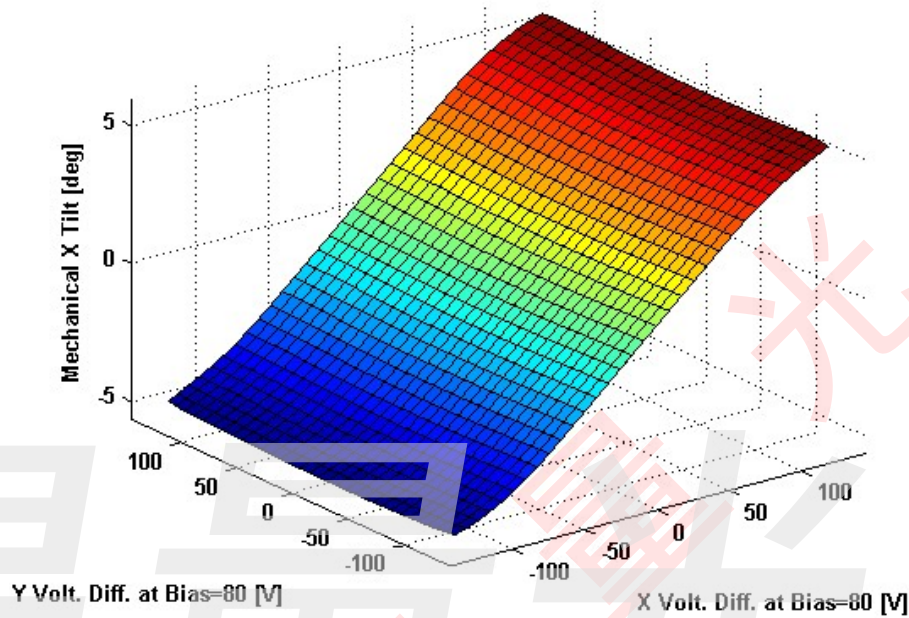


Y-Axis Step Response

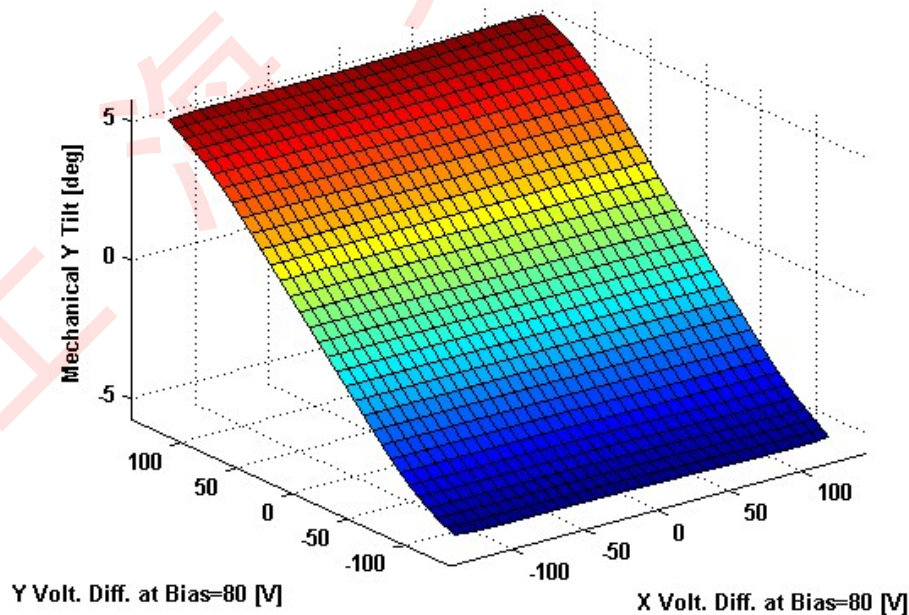


2D Lookup Tables

Voltage vs. X Angle - Lookup Table



Voltage vs. Y Angle - Lookup Table



Y Angle vs. X Angle - Addressable Angles

