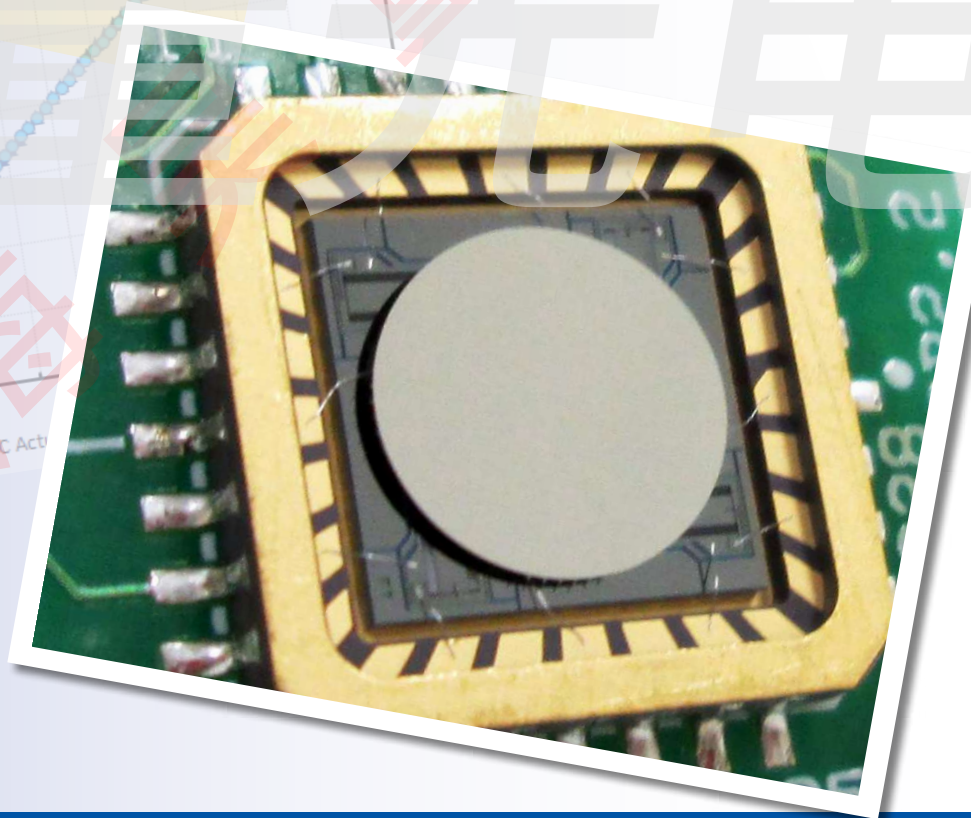
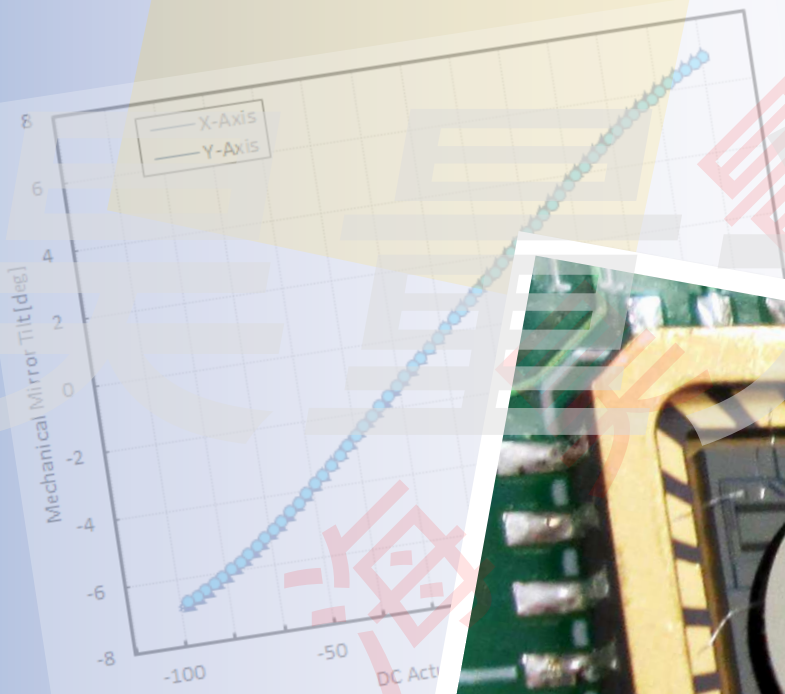


Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S45810



www.auniontech.com

Device Parameters Summary

Device ID : S45810

Actuator Type: A5L2.2

Actuator Mode : Gimbal-less Dual-Axis Quasistatic

Mirror Type and Size : Bonded mirror of 3.0mm diameter

Mirror Coating : Aluminum

Maximum Mech. Angle - X Axis [degrees] : 1.0482

Maximum Mech. Angle - Y Axis [degrees] : 1.0489

Maximum Vdifference - X Axis [V] : 160

Maximum Vdifference - Y Axis [V] : 159

Driver Bias Voltage (Vbias) [V] : 80

Maximum Mech. Angle - Coupled Axes [degrees] : 1.2170

Resonant Frequency - X Axis [Hz] : 2859

Resonant Frequency - Y Axis [Hz] : 2844

Quality Factor - X Axis : 96

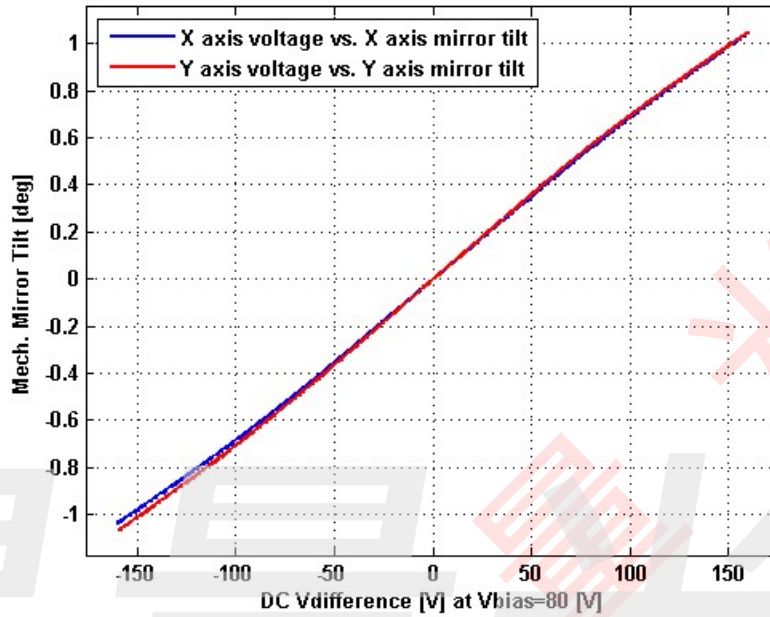
Quality Factor - Y Axis : 94

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

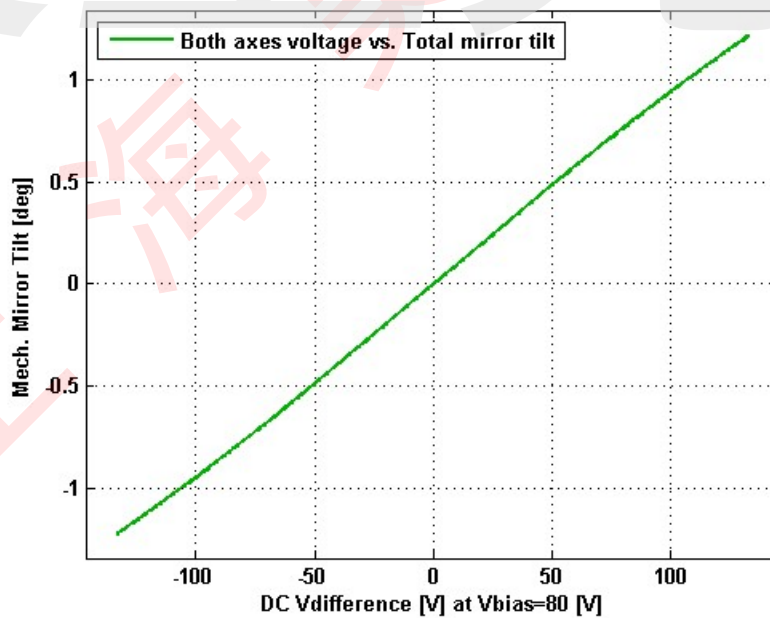
Date and Time Report was Created: 23-Jul-2019 at 15:35:36

Static Response

Voltage vs. Mech. Angle - Individual Axes

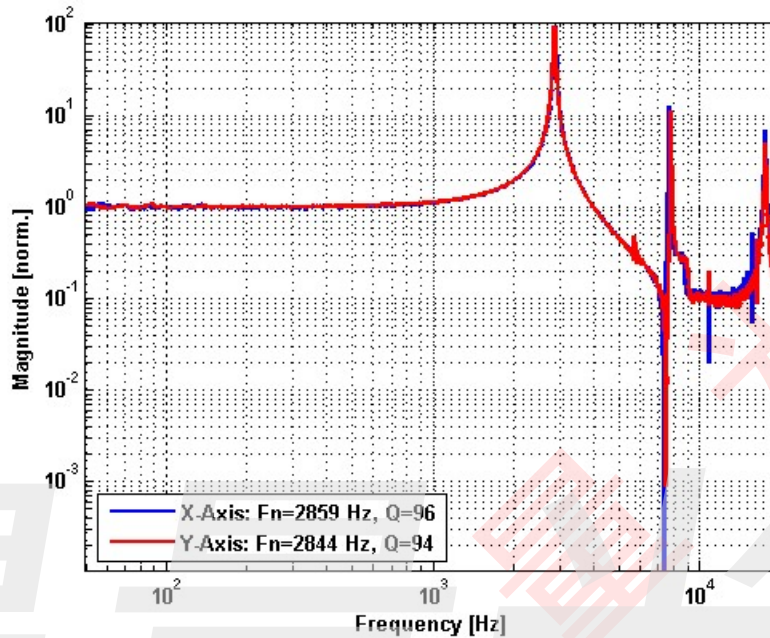


Voltage vs. Mech. Angle - Coupled Axes

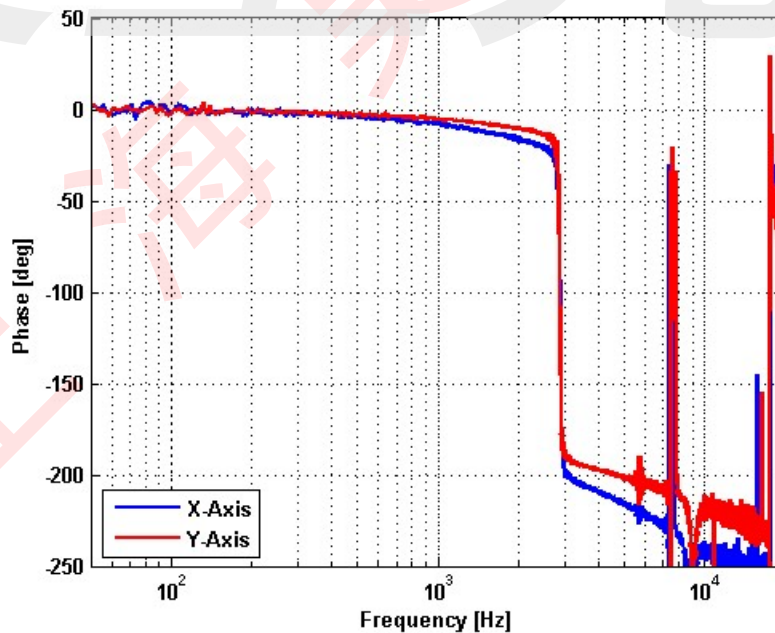


Frequency Response

Small Signal Frequency Response - Magnitude

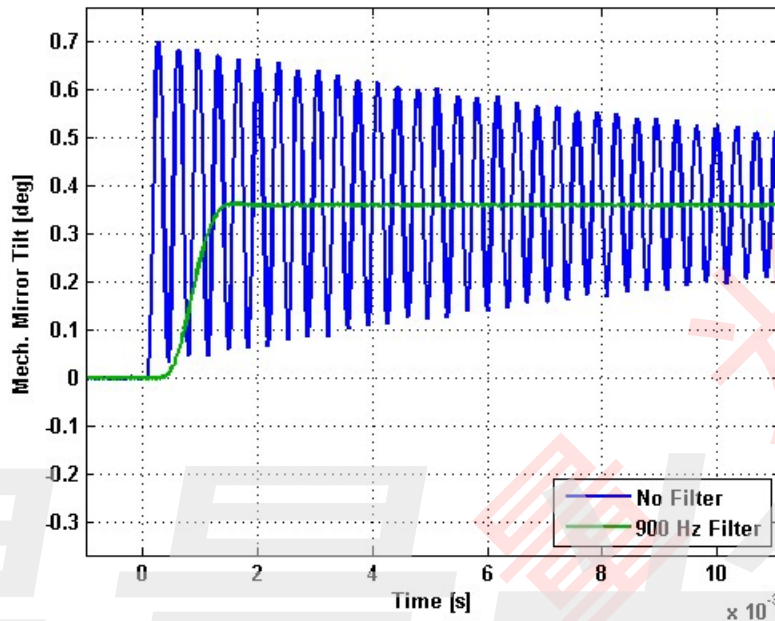


Small Signal Frequency Response - Phase

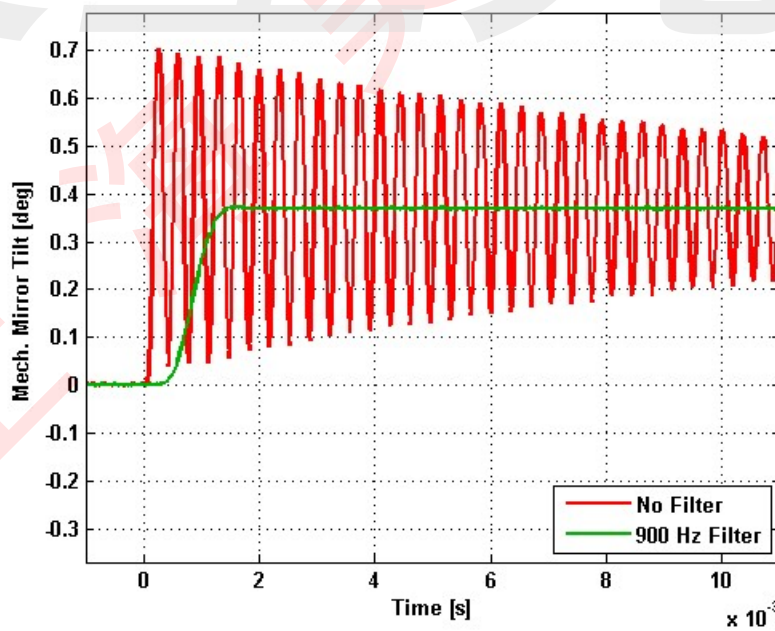


Step Response

X-Axis Step Response

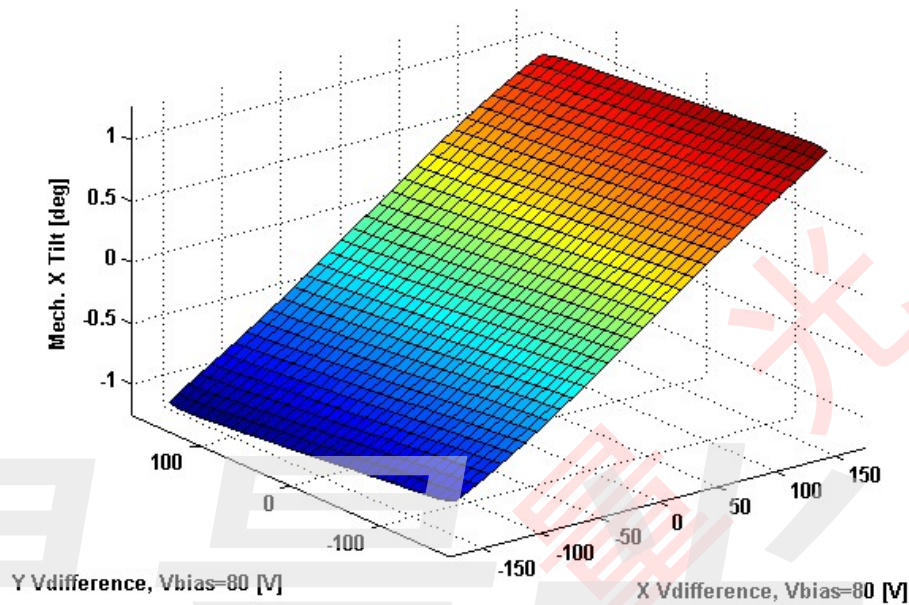


Y-Axis Step Response

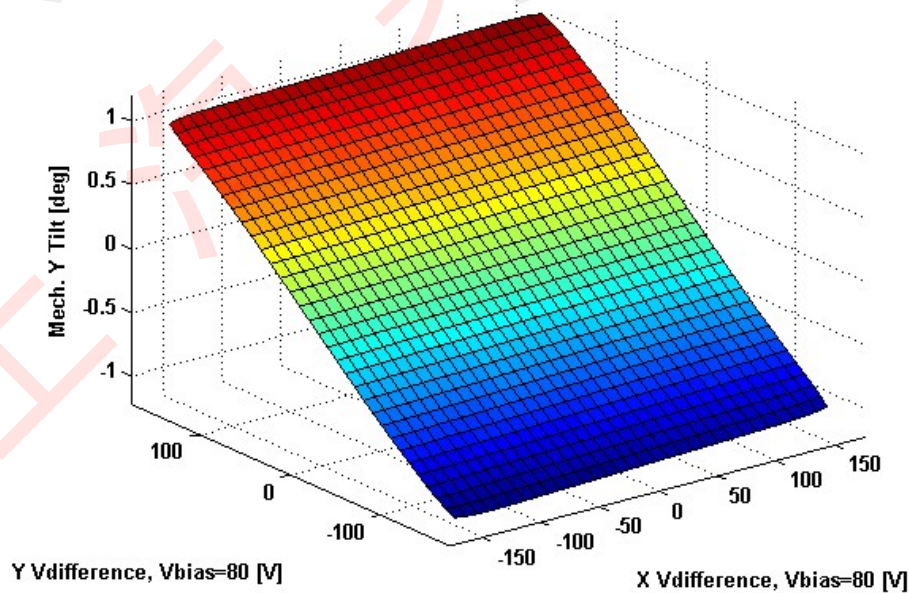


2D Lookup Tables

Voltage vs. X Mech. Angle - Lookup Table



Voltage vs. Y Mech. Angle - Lookup Table



Y vs. X Tilt - Addressable Mech. Angles

