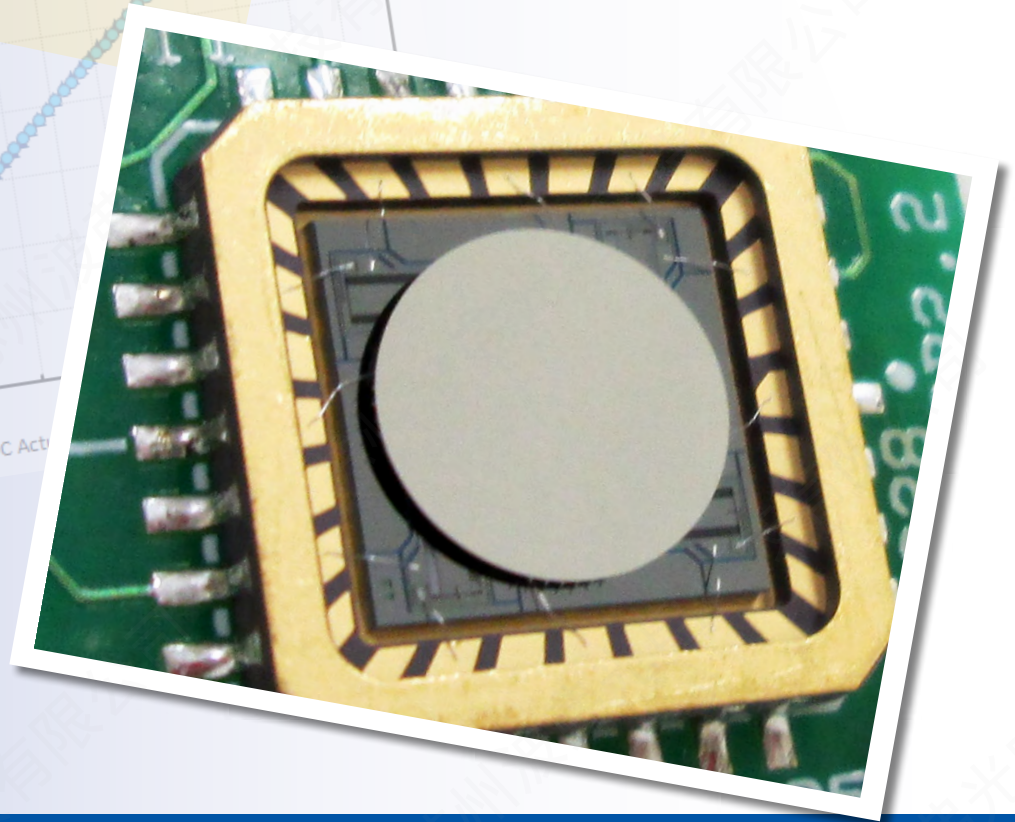
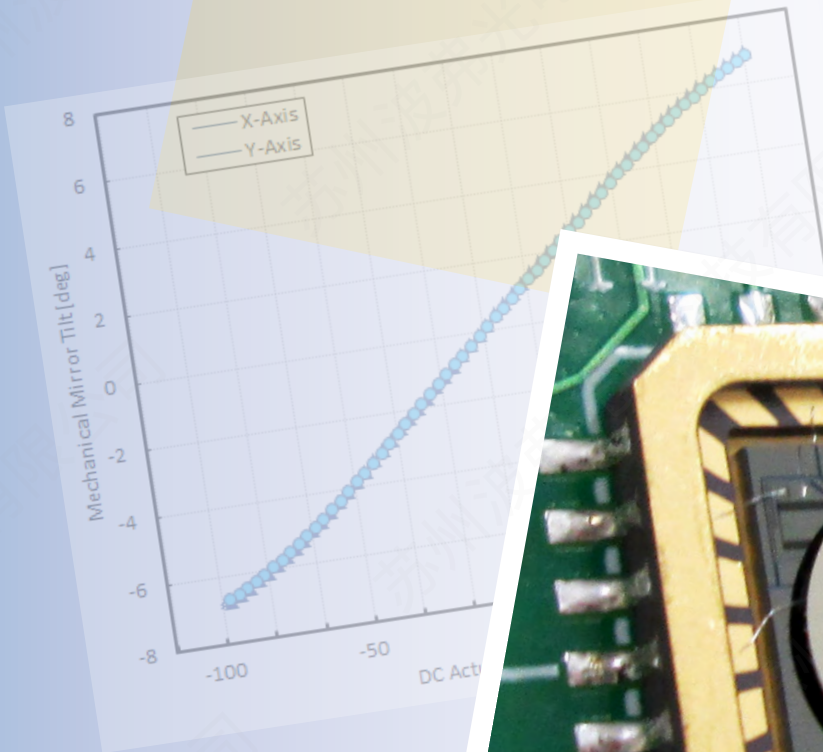


Gimbal-Less Two-Axis Scanning MEMS Micromirrors

Device Datasheet
S45266



www.MirrorcleTech.com

© 2019 Mirrorcle Technologies, Inc. All rights reserved.

Device Parameters Summary

Device ID : S45266

Actuator Type: A7M10.2

Actuator Mode : Gimbal-less Dual-Axis Quasistatic

Mirror Type and Size : Integrated mirror of 1000um diameter

Mirror Coating : Aluminum

Maximum Mech. Angle - X Axis [degrees] : 5.1930

Maximum Mech. Angle - Y Axis [degrees] : 5.1309

Maximum Vdifference - X Axis [V] : 180

Maximum Vdifference - Y Axis [V] : 180

Driver Bias Voltage (Vbias) [V] : 90

Maximum Mech. Angle - Coupled Axes [degrees] : 7.6146

Resonant Frequency - X Axis [Hz] : 4473

Resonant Frequency - Y Axis [Hz] : 4458

Quality Factor - X Axis : 86

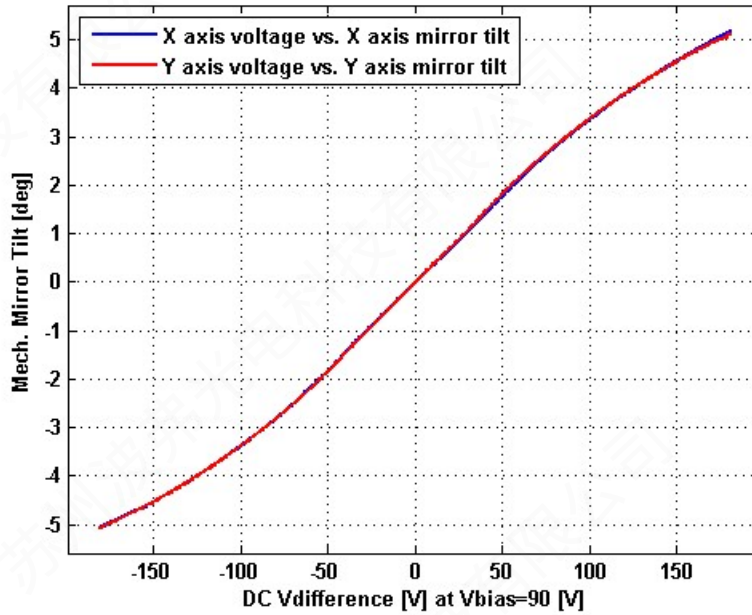
Quality Factor - Y Axis : 89

Recommended LPF Cutoff Frequency (6th Order Bessel) [Hz] : 2200

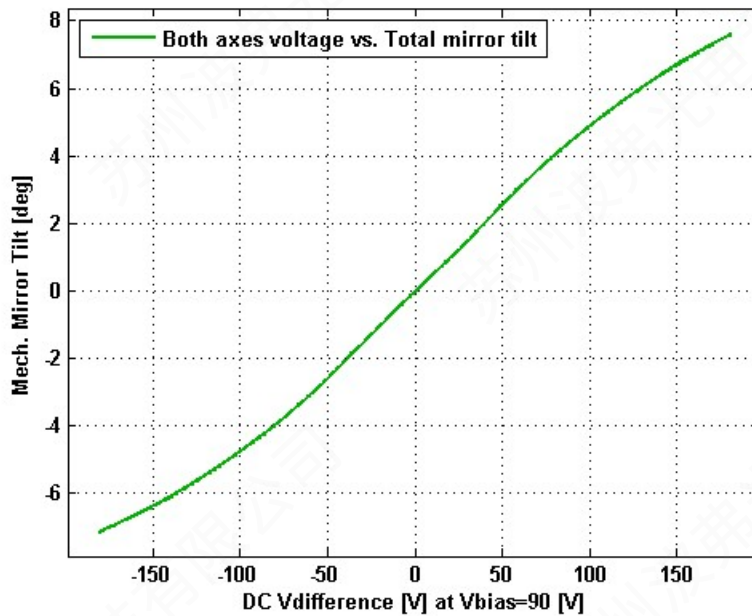
Date and Time Report was Created: 17-Jul-2019 at 16:47:34

Static Response

Voltage vs. Mech. Angle - Individual Axes

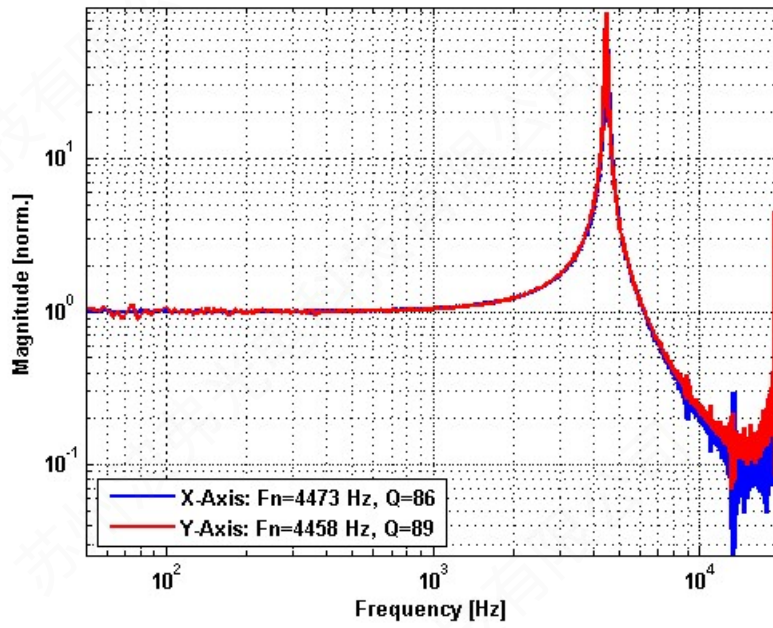


Voltage vs. Mech. Angle - Coupled Axes

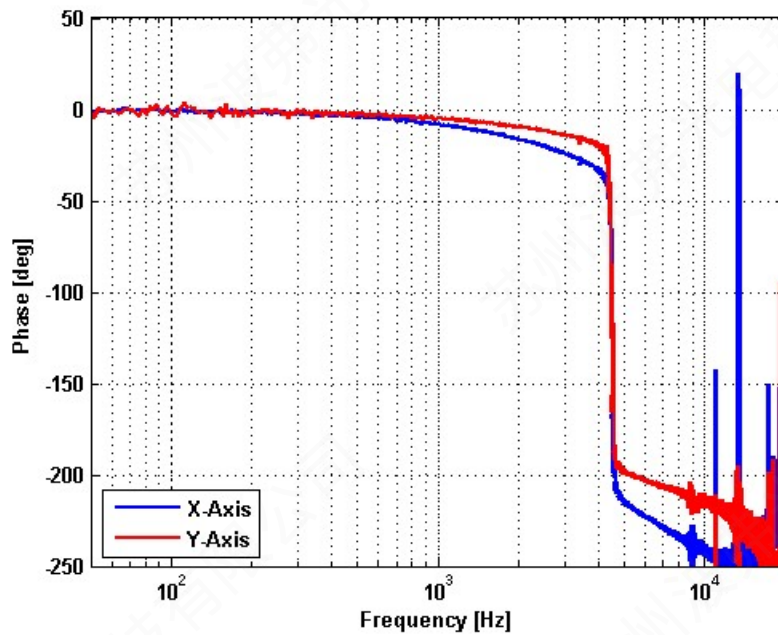


Frequency Response

Small Signal Frequency Response - Magnitude

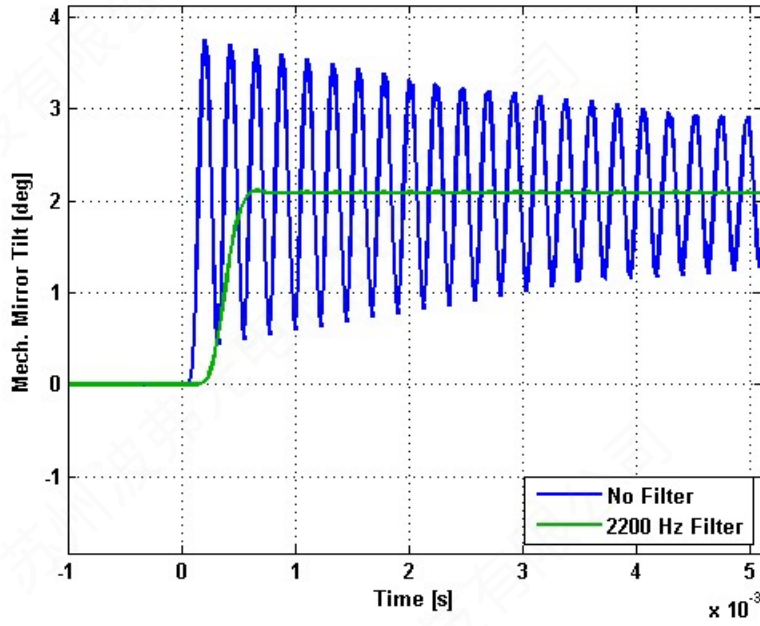


Small Signal Frequency Response - Phase

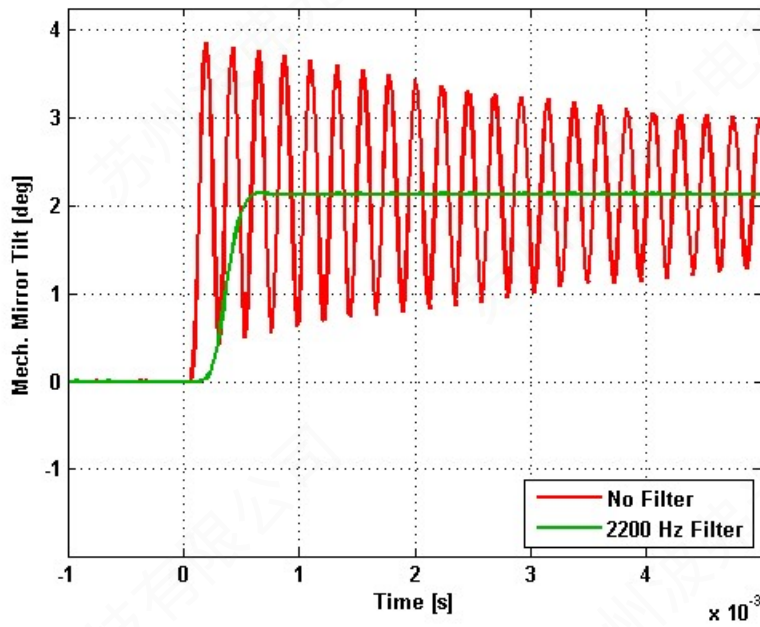


Step Response

X-Axis Step Response

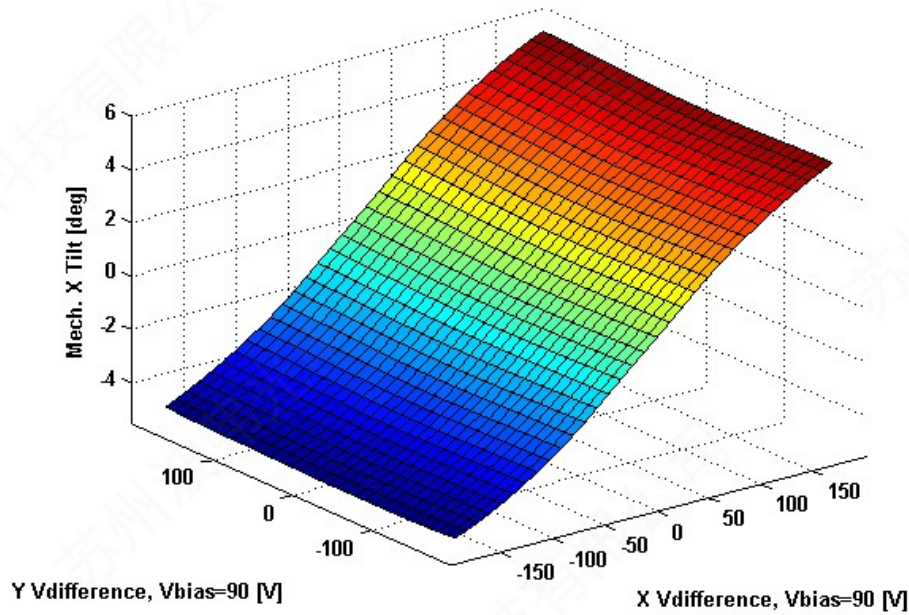


Y-Axis Step Response

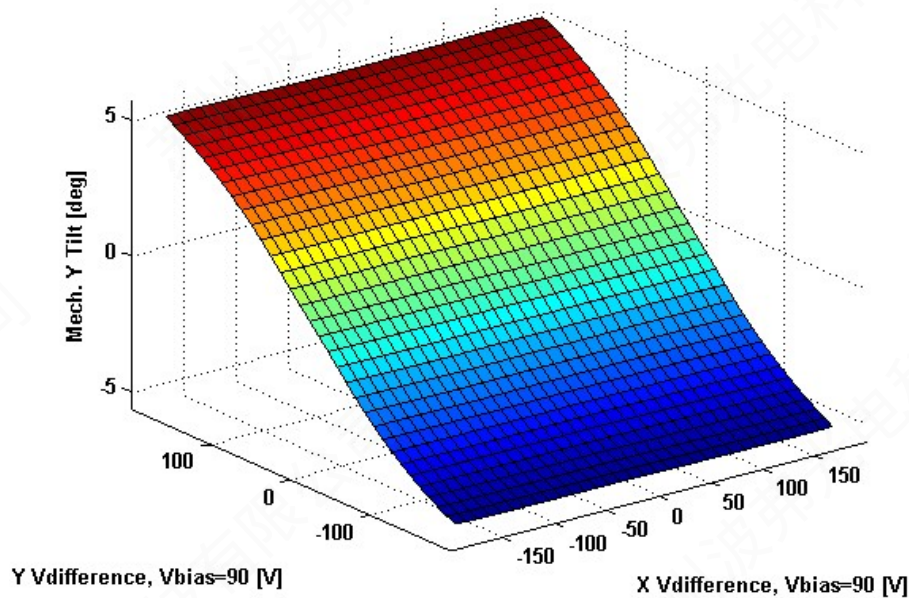


2D Lookup Tables

Voltage vs. X Mech. Angle - Lookup Table



Voltage vs. Y Mech. Angle - Lookup Table



Y vs. X Tilt - Addressable Mech. Angles

