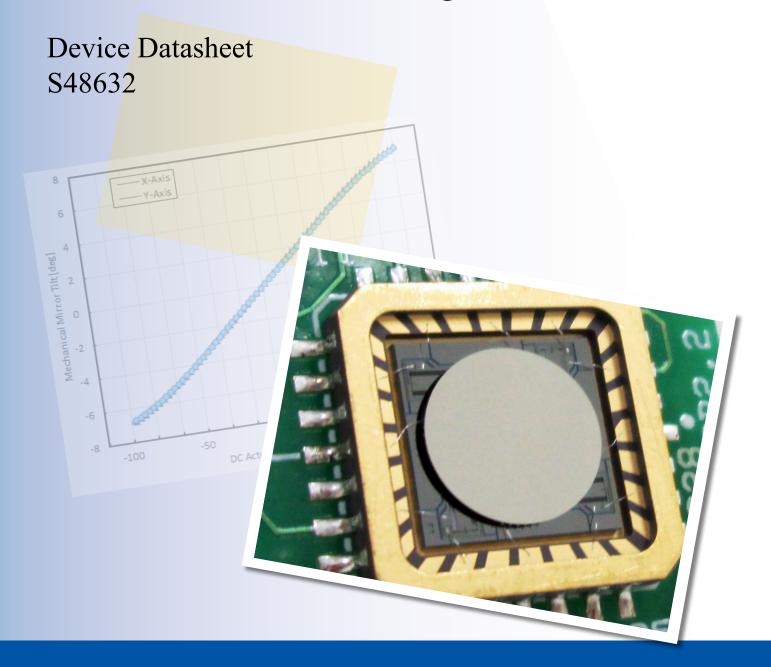


#### **Gimbal-Less Two-Axis Scanning MEMS Micromirrors**



### **Device Parameters Summary**

**Device ID**: S48632

**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]: 1.2564

Maximum Mech. Angle - Y Axis [degrees]: 1.2474

Maximum Vdifference - X Axis [V]: 173

Maximum Vdifference - Y Axis [V]: 173

Driver Bias Voltage (Vbias) [V]: 90

Maximum Mech. Angle - Coupled Axes [degrees]: 1.5088

Resonant Frequency - X Axis [Hz]: 2866

Resonant Frequency - Y Axis [Hz]: 2869

**Quality Factor - X Axis: 98** 

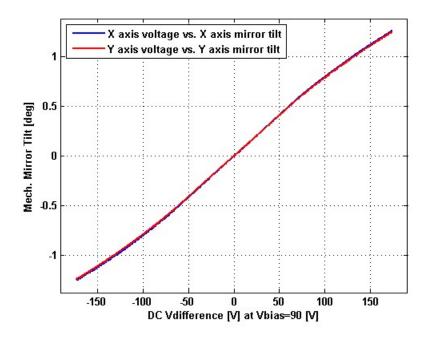
**Quality Factor - Y Axis:** 98

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

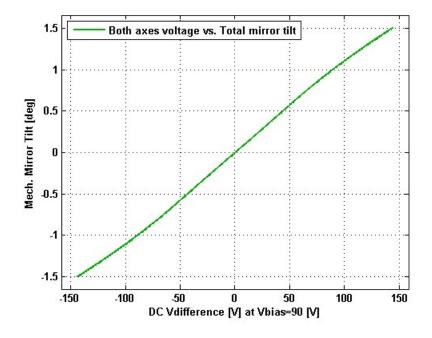
Date and Time Report was Created: 15-Oct-2020 at 18:53:21

## **Static Response**

### Voltage vs. Mech. Angle - Individual Axes

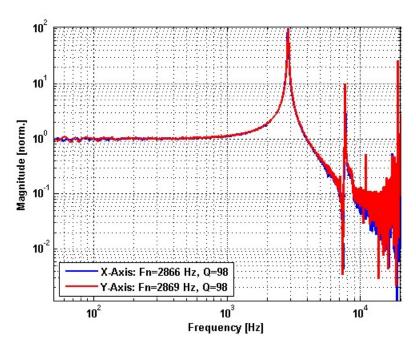


### Voltage vs. Mech. Angle - Coupled Axes

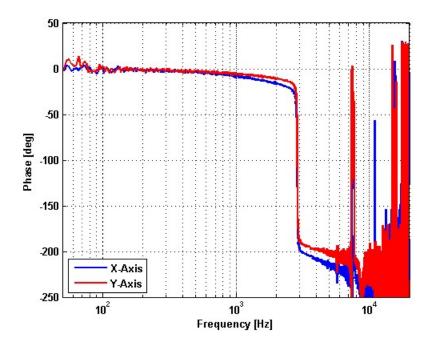


# **Frequency Response**

### **Small Signal Frequency Response - Magnitude**

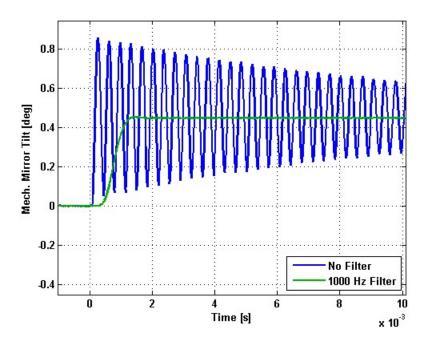


### **Small Signal Frequency Response - Phase**

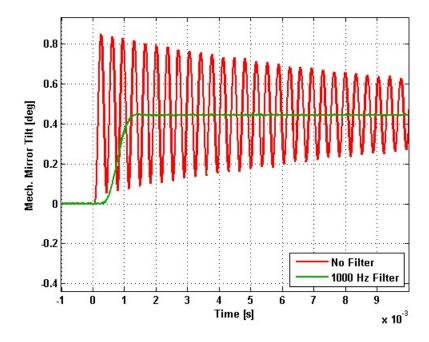


## **Step Response**

### **X-Axis Step Response**

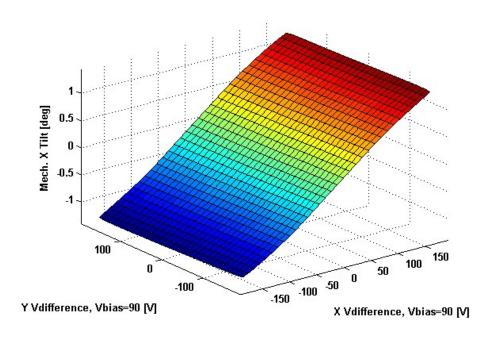


## **Y-Axis Step Response**

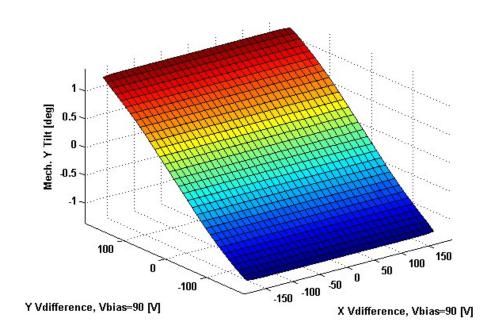


## **2D Lookup Tables**

### Voltage vs. X Mech. Angle - Lookup Table



#### Voltage vs. Y Mech. Angle - Lookup Table



## Y vs. X Tilt - Addressable Mech. Angles

