

TYPICAL PERFORMANCE CURVES:

Fast Axis (Mirror)

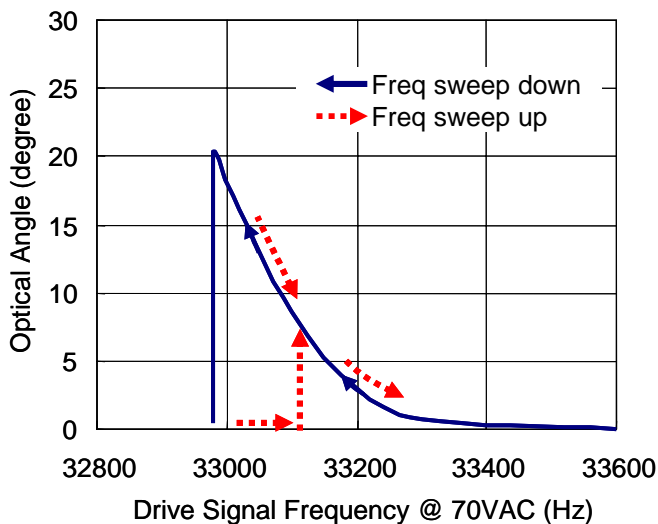


Figure 1. Optical Scan Angle vs. Drive Frequency of Fast Axis (High Frequency Axis) With Constant Drive Voltage
(Note the hysteresis behavior of frequency sweeping)

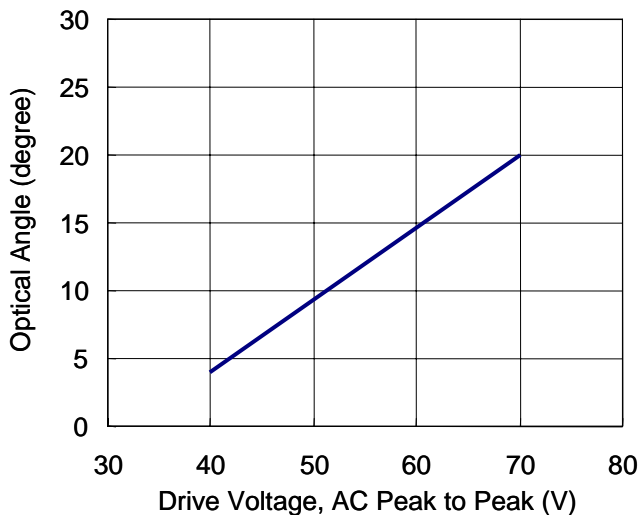


Figure 2. Scan Angle vs. Drive Voltage of Fast Axis (High Frequency Axis) With Constant Drive Signal Frequency

Slow Axis (Gimbal Frame)

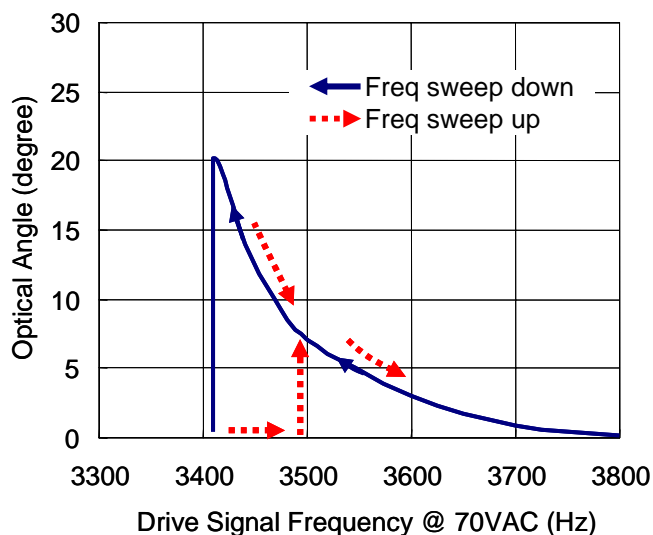


Figure 3. Optical Scan Angle vs. Drive Frequency of Slow Axis (Low Frequency Axis) With Constant Drive Voltage
(Note the hysteresis behavior of frequency sweeping)

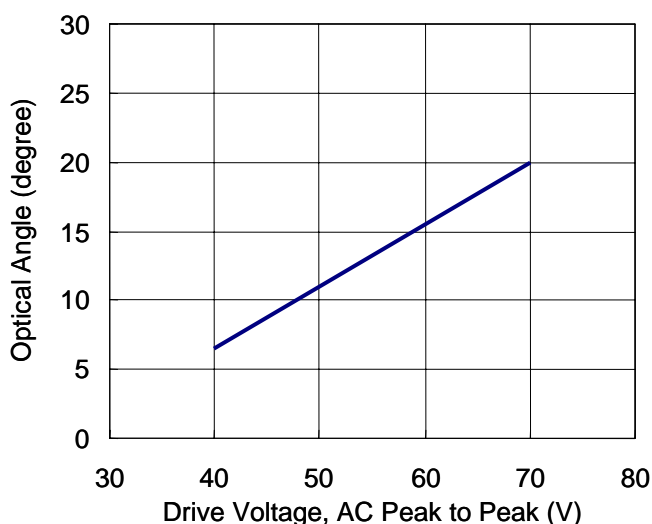


Figure 4. Scan Angle vs. Drive Voltage of Slow Axis (Low Frequency Axis) With Constant Drive Signal Frequency

MIRROR SCAN TRAJECTORY & DRIVE SIGNAL

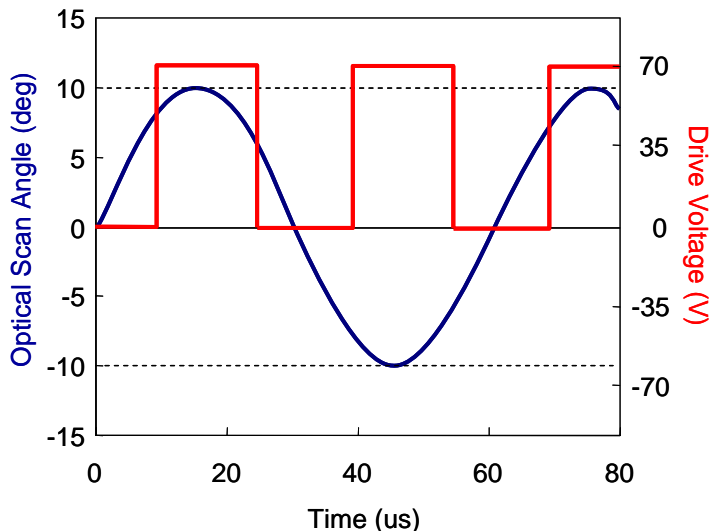


Figure 5. Typical Scan Trajectory Versus Drive Signal

Remarks:

1. Mirror scan trajectory is sinusoidal and scan frequency is half of drive signal frequency.
2. There is an inherent phase difference between drive signal and scan trajectory.
3. Due to hysteresis behavior, mirror scanning can be started by sweeping drive frequency from high to desired operation point.
4. Mirror scanning can also be started by increasing duty ratio from low (5% typical) to 50% with fixed drive frequency.
5. Duty ratio exceeding 50% will not yield higher scan angle.
6. Stability of mirror scan is dominated by the stability of drive signal amplitude and frequency.

PACKAGE OUTLINE & PIN ASSIGNMENT

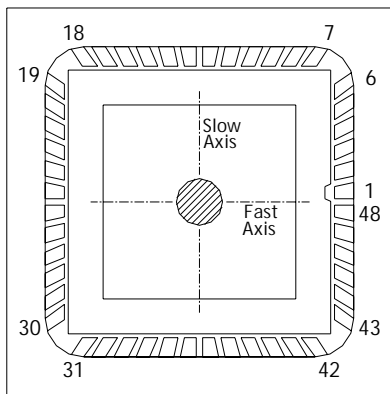


Figure 6. Package Drawing Top View

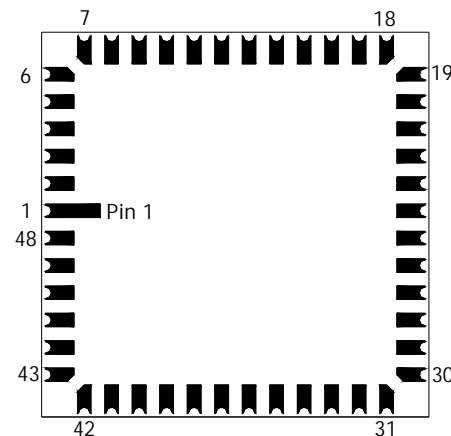


Figure 7. Package Drawing Bottom View

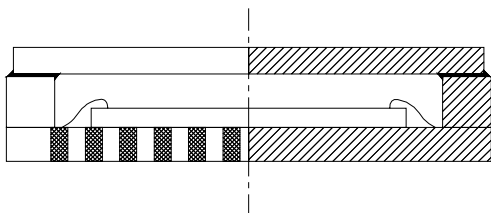


Figure 8. Package Drawing Side View

PIN #	DESCRIPTION
Pin 11	Fast Axis Drive Signal
Pin 8, 14, 32, 38	Slow Axis Drive Signal
Pin 17, 35, 40, 41	Ground
All other pins	Not Connected

Table 1. Pin Assignment