# Bulk Indium BH-706
Two Axis

## Description
The BH-706 multi-axis Hall sensor consists of two Hall elements mounted in mutually perpendicular planes and encapsulated in a small epoxy package. This enables the BH-706 to produce voltages proportional to two perpendicular components ($B_x$, $B_y$) of a magnetic field. Thus the BH-706 may be permanently mounted to sense field components in its X, Y planes.

The magnitude of the flux vector, B within the X, Y plane can be found using the following equation:

$$B = \sqrt{B_x^2 + B_y^2}$$

The direction of B can be computed using the following equation:

$$\text{Ø} = \tan^{-1} B_y / B_x$$

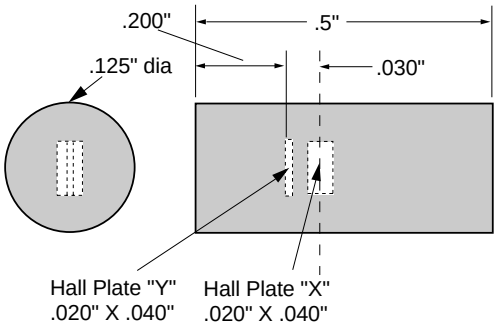
where Ø is the angle between B and $B_x$.

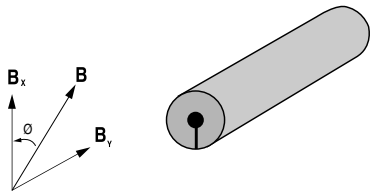
## Mechancal Specifications
Leads: #34 AWG copper with polyurethane insulation, approximately 20" long. The BH-706 has 8 leads.

Polarity: When the magnetic field vectors are oriented as shown, and $I_c$ enters the red leads, the positive Hall voltage appears at the blue leads.

Note: All tolerances unless specified are ±0.010".

## Features
- Two Axis, simultaneous measurement
- Instrumentation Quality




Unless otherwise noted:
B=1 kG, $I_c = I_{cn}$, T=25 C, Static air.