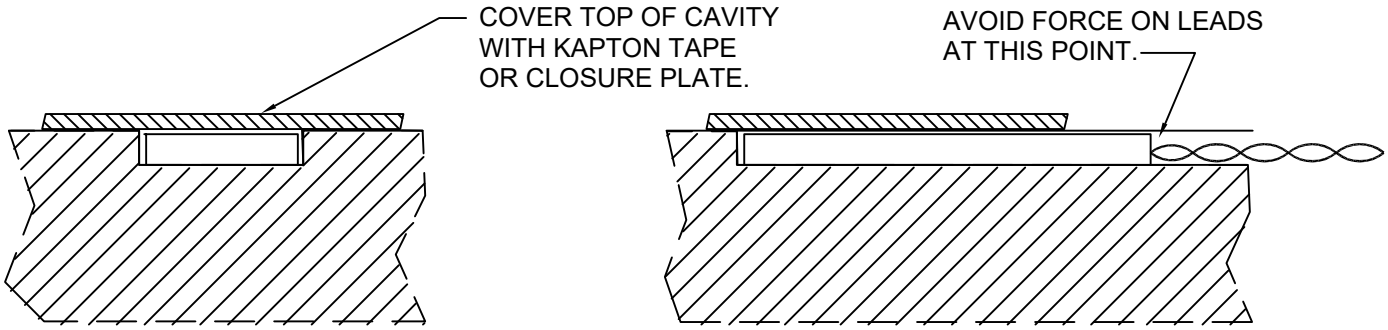
Mounting a Transverse Cryogenic Hall Sensor

A CERAMIC-CASED TRANSVERSE CRYOGENIC HALL SENSOR CAN BE MOUNTED SEVERAL WAYS, SOME BETTER THAN OTHERS.

1. CAVITY MOUNT

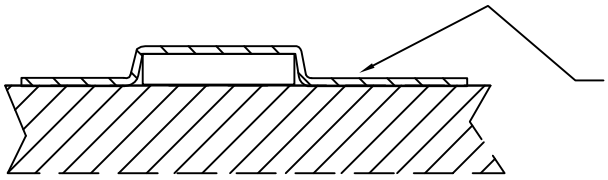
THE IDEAL METHOD IS TO MOUNT THE SENSOR IN A PRE-MACHINED CAVITY. THIS ALLOWS THE DEVICE TO "FLOAT", MINIMIZING EXPANSION STRESSES.



HALL SENSOR "FLOATS"
(IS NOT BONDED TO CAVITY)

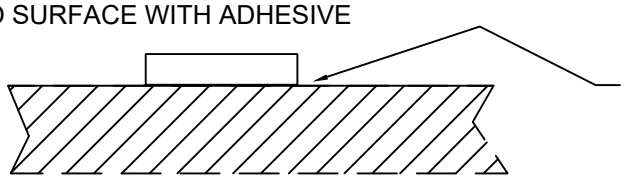
CAVITY SHOULD BE CLOSE TOLERANCE, BUT EXPANSION MUST BE CONSIDERED.

2. TAPE MOUNT ON SURFACE



LEADS SHOULD BE STRAIN RELIEVED (POSSIBLY WITH TAPE).

3. BOND TO SURFACE WITH ADHESIVE



SOME PRACTICES TO AVOID:

DO NOT COMPLETELY POT THE SENSOR WITH EPOXY OR OTHER POTTING COMPOUNDS..

DO NOT APPLY FORCE TO THE LEADS. THEY CAN BREAK QUITE EASILY.

Lake Shore CRYOTRONICS
a DwyerOmega brand