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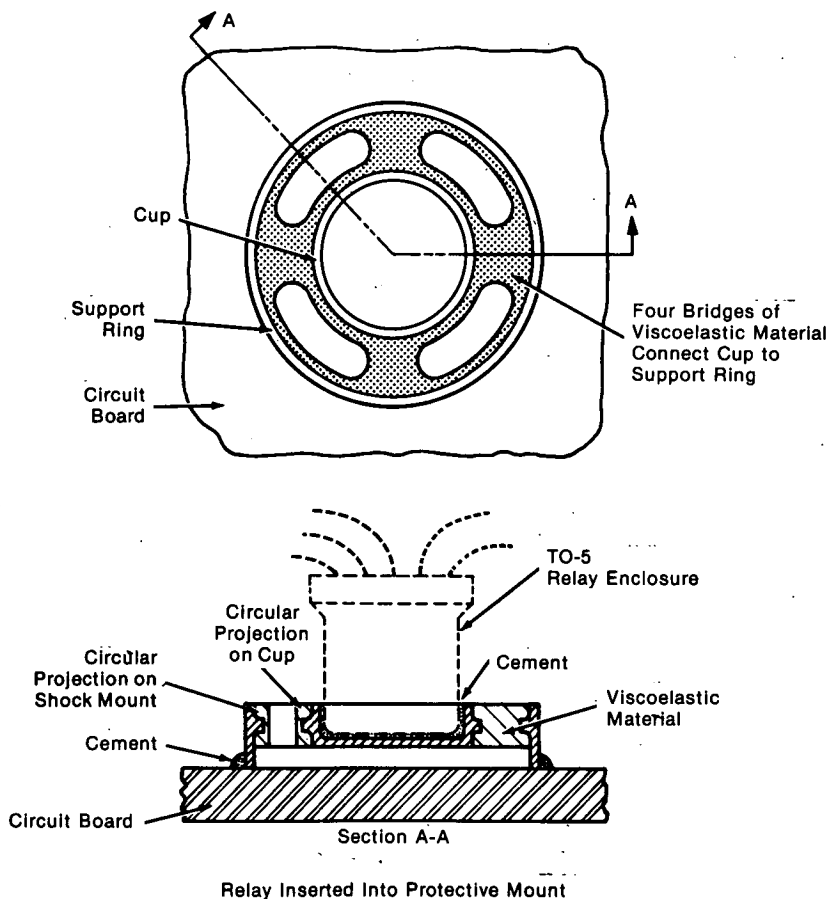
Shock and Vibration Isolation Mount for Small Electronic Components

A new mount has been developed for small electronic components which protects them from shock and vibration. It is used with small relays encased in TO-5 size packages.

The mount as shown in the illustration includes a metallic cup and a support ring placed in a mold fixture. A viscoelastic material (Solithane Formula 6 or equivalent) is injected between these parts by means of a large hypodermic needle. Circular projections on the cup and the ring extend into the

material and are kept in place without dependence on the quality of the adhesion between the material and the metal. The relay is inserted into the cup and is attached to it with adhesive. Then the outer ring of the entire assembly is adhesive-bonded to a circuit board.

The mount has been tested to shock levels of up to 3,700 g with no degradation to it. It is very soft and has a very low natural frequency and a very high damping coefficient.



(continued overleaf)

Note:

Requests for further information may be directed to:

Technology Utilization Officer
NASA Pasadena Office
4800 Oak Grove Drive
Pasadena, California 91103
Reference: TSP75-10049

Patent status:

This invention has been patented by NASA (U.S. Patent No. 3,863,881). Inquiries concerning non-exclusive or exclusive license for its commercial development should be addressed to:

Patent Counsel
NASA Pasadena Office
4800 Oak Grove Drive
Pasadena, California 91103

Source: Robert F. Dillon of
Martin Marietta Corp. and
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