

ABSTRACT

A base (10) has a substantially cylindrical plug (12) penetrated by two leads 14. A piezoelectric oscillator (24) is secured to and supported on ends of the two leads by supports (26).
5 The supports (26) are formed from solder having as high lead content of more than 60 % by weight, preferably 85 to 98 % by weight. A cap (28) open at one end is fitted on the piezoelectric oscillator (24). The plug (12) seals the open end of the cap (28) and forms a gas-tight casing, thus forming a piezoelectric oscillator unit
10 with piezoelectric oscillator (24) held gas-tight in the inside. The high lead content solder is soft and has a low Young's Modulus, so that it can disperse stress when the piezoelectric oscillator experiences. It is thus possible to evade stress concentration on the piezoelectric oscillator (24) and improve shock resistance.
15 A layer of a solder with a lead content of 60 % by weight or less or of tin or a tin alloy, is formed on the surface of the leads (14), and ensures solder wetting property.