

ABSTRACT

A multiphase thermal interface component, a method of forming the same, and an electronic device testing apparatus provided with the same are provided. The multiphase thermal interface component includes a thermal interface solid element and a thermal interface fluid material. The thermal conductive surface of the thermal interface solid element has an accommodation space, and the thermal interface fluid material is accommodated in the accommodation space. Therefore, the multiphase thermal interface component combines solid-phase and fluid-phase thermal interface materials. Since fluids have the properties of changing shape, flowing, and splitting arbitrarily, the thermal interface fluid material can completely fill up the air gaps between the thermal interface solid element and the thermal control device/the temperature-controlled component, so that the full surface temperature control of the contact interface can be achieved, thereby effectively improving the thermal conduction performance.

FIG. 1A