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(54) **WIRING BOARD UNIT AND METHOD FOR DESIGNING THE SAME**

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(57) **ABSTRACT**

A wiring board unit capable of reducing the stress inside the wiring board to reduce the risk of a crack being formed from a location where stress is concentrated. To achieve this, the present invention includes a first wiring board and a second wiring board bonded to the first wiring board. A semiconductor element being resin-sealed on a surface side of the second wiring board opposite to a surface for bonding with the first wiring board. A tensile strength of an insulating resin material used for the second wiring board and a width of a Cu pattern formed on the side opposite to the first wiring board give a value smaller than 0.5 when substituted in Formula 1 below.

$$\frac{1}{1 + \text{Exp}(-A)}$$

(1)

$$A = -15.45 - 0.1654 \times \text{Tensile strength} + 11.31 \times \log(\text{Cu pattern width})$$

