

Title (en)

METHOD FOR THE PRODUCTION AND CONTACTING OF ELECTRONIC COMPONENTS BY MEANS OF A SUBSTRATE PLATE, PARTICULARLY A DCB CERAMIC SUBSTRATE PLATE

Title (de)

VERFAHREN ZUR HERSTELLUNG UND KONTAKTIERUNG VON ELEKTRONISCHEN BAUELEMENTEN MITTELS EINER SUBSTRATPLATTE, INSBESONDERE DCB-KERAMIK-SUBSTRATPLATTE

Title (fr)

PROCÉDÉ DE FABRICATION ET DE CONNEXION DE COMPOSANTS ÉLECTRONIQUES AU MOYEN D'UNE PLAQUE SUBSTRAT, NOTAMMENT D'UNE PLAQUE SUBSTRAT CÉRAMIQUE DCB

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Application

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Abstract (en)

[origin: WO2009030562A1] The present invention relates to a method for contacting at least one unhusd electronic component (1), particularly a power component or semiconductor power component, having at least one connecting surface (7) disposed on a top side (3) and/or on a bottom side (5) for fastening and/or for electric contacting. The invention provides cost-effective electric contacting of an unhusd electronic component (1), particularly a power component or a semiconductor power component, and particularly for the high-voltage range greater than 1000 Volts, having connecting surfaces (7) for fastening and/or for electric contacting on a top side (3) and/or a bottom side (5). The invention further relates to creating high integration density, low inductance behavior of the contact, high current-carrying capability, effective cooling, and/or high reliability with regard to electric and thermal cycle stress. The bottom side (5) of the component (1) is attached to and/or electrically contacts a substrate (11), particularly a DCB ceramic substrate, at an opposing connecting surface (9) in the region of the connecting surface (7); an electrically insulating carrier film (13) is created on the substrate (11) on the side facing the component (1) outside the region of the connecting surface (7) and extending beyond the bottom side (5); an electrically conducting conductor part (15) is attached to and/or electrically contacts the connecting surface (7) on the top side (3), said part forming a pre-formed, three-dimensional structure and extending beyond the area of the top side (3), wherein an electrically insulating mass (17) is created between the carrier film (13) and the three-dimensional structure of the conductor part (15).

IPC 8 full level

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