

Title (en)  
ELECTRONIC SEMICONDUCTOR MODULE

Title (de)  
ELEKTRONISCHES HALBLEITERMODUL

Title (fr)  
MODULE SEMI-CONDUCTEUR ELECTRONIQUE

Publication  
**EP 1062698 A1 20001227 (DE)**

Application  
**EP 99967900 A 19991223**

Priority  
• DE 9904085 W 19991223  
• DE 19900603 A 19990111

Abstract (en)  
[origin: DE19900603A1] In order to improve the dissipation of heat and to reduce parasitic inductivities in an electronic semiconductor module that consists of a carrier substrate (1) with an electrically insulating layer (2), a metal layer (4) arranged on the top surface of the insulating layer whereby strip conductors (4a) are configured inside said metal layer, and a metal cooling body (3) that is placed on the bottom side of the insulating layer, in addition to at least one semiconductor element arranged on the carrier substrate, the electrically insulating layer that is provided with at least one recess (13) and at least one connecting surface (22) that is located on the top side of the semiconductor element opposite the carrier substrate is electrically connected to a contact element (2) that is directly brought into contact with the metal cooling body via the recess.

IPC 1-7  
**H01L 23/373**; **H01L 23/14**

IPC 8 full level  
**H01L 23/36** (2006.01); **H01L 23/473** (2006.01); **H01L 23/64** (2006.01)

CPC (source: EP KR US)  
**H01L 23/36** (2013.01 - EP US); **H01L 23/645** (2013.01 - EP US); **H01L 24/48** (2013.01 - EP US); **H01L 25/00** (2013.01 - KR); **H01L 2224/05599** (2013.01 - EP US); **H01L 2224/48091** (2013.01 - EP US); **H01L 2224/48227** (2013.01 - EP US); **H01L 2224/48228** (2013.01 - EP US); **H01L 2224/484** (2013.01 - EP US); **H01L 2224/85399** (2013.01 - EP US); **H01L 2924/00014** (2013.01 - EP US); **H01L 2924/01005** (2013.01 - EP US); **H01L 2924/01006** (2013.01 - EP US); **H01L 2924/01011** (2013.01 - EP US); **H01L 2924/01013** (2013.01 - EP US); **H01L 2924/01015** (2013.01 - EP US); **H01L 2924/01029** (2013.01 - EP US); **H01L 2924/01052** (2013.01 - EP US); **H01L 2924/014** (2013.01 - EP US); **H01L 2924/1305** (2013.01 - EP US); **H01L 2924/13055** (2013.01 - EP US); **H01L 2924/13091** (2013.01 - EP US); **H01L 2924/19041** (2013.01 - EP US); **H01L 2924/19107** (2013.01 - EP US); **H01L 2924/30107** (2013.01 - EP US)

Citation (search report)  
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