

Title (en)
A SELF-POSITIONING HEAT SPREADER.

Title (de)
SELBSTAUSRICHTENDE WÄRMESTREUUNGSANORDNUNG.

Title (fr)
DIFFUSEUR THERMIQUE A AUTO-POSITIONNEMENT.

Publication
EP 0104231 A4 19851030 (EN)

Application
EP 83901297 A 19830311

Priority
US 36511482 A 19820405

Abstract (en)
[origin: WO8303712A1] Heat spreader (10) which is self-positioning into a mold cavity prior to encapsulation in plastic. To minimize capacitance between heat spreader (10) and a metal lead frame having a semiconductor die mounted thereon, heat spreader (10) has a frame with notches (14 and 16) in opposite ends which define bifurcated limbs (18, 20, 22 and 24). Lateral standoffs (42, 44, 46 and 48) extend from each side (78 and 80), and feet (50, 52, 54 and 56) extend from a bottom surface. Central portion (58) extends a predetermined distance from a top surface for positioning with the lead frame. Standoffs (42, 44, 46 and 48), limbs (18, 20, 22 and 24) and feet (50, 52, 54 and 56) are sized to firmly position heat spreader (10) upon insertion into the mold cavity. Each bifurcated limb (18, 20, 22 and 24) has an inner edge (34, 36, 38 and 40) which complements or conforms to the portion of the lead frame which will overlay the limb in the encapsulated plastic.

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IPC 8 full level
H01L 23/367 (2006.01); **H01L 23/433** (2006.01); **H01L 21/36** (2006.01); **H01L 23/48** (2006.01)

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H01L 2924/3011 (2013.01 - EP)

C-Set (source: EP)
H01L 2924/0002 + **H01L 2924/00**

Citation (search report)
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• [A] US 3930114 A 19751230 - HODGE ROBIN H
• [A] EP 0047195 A2 19820310 - EFCIS [FR]
• [A] NL 6901240 A 19690729
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• [A] GB 1239634 A 19710721
• [A] US 3585272 A 19710615 - SHATZ SOLOMON
• [A] PATENTS ABSTRACTS OF JAPAN, vol. 6, no. 25 (E-94) [903], February 13, 1982; & JP - A - 56 146 263 (NIPPON DENKI K.K.) 13-11-1981

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