Quality investigation of miniaturized Moulded Interconnect Devices (MIDs) for hearing aid applications - DTU Orbit (17/01/2019)

**Quality investigation of miniaturized Moulded Interconnect Devices (MIDs) for hearing aid applications**

Moulded Interconnect Devices (MIDs) are injection moulded plastic substrates with electrical infrastructures on the surfaces. The miniaturization of MIDs raises challenges in terms of materials, process chains, geometrical precision, etc. This paper discusses the precision limit of MIDs in terms of positioning accuracies, dimensional fidelity and surface topography of the metal tracks. The paper proposes a novel method for the corrosion protection of the MID metal surface. The results obtained from the tests demonstrate the feasibility of the use of MIDs in the hearing aid application and an efficient protection of the MIDs from corrosion induced by harsh application environment.

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