

## 증발부와 응축부의 면적 변화에 따른 히트 스프레더의 열전달 성능에 관한 연구

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### A Study on the Heat Transfer Performance of a Heat Spreader according to Varying an Area of Evaporator and Condenser Section

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**Key Words:** Heat spreader(히트 스프레더) , Evaporator (증발부), Condenser(응축부), Thermal resistance(열저항)

**Abstract :** The purpose of the present study is to investigate thermal performance of the heat spreader which was made with screen meshes for wicks and vapor passages. Particularly, in order to investigate thermal performance of the heat spreader according to varying an area of evaporator and condenser section, the temperature of the surface of the heat spreader was measured. Finally, as a result of comparing the thermal resistance of the heat spreader in each case, it is shown that the heat spreader has excellent cooling and heat transfer performance.

## 히트 스프레더의 증발부와 응축부 높이 차에 따른 열전달 성능에 관한 연구

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### A Study on the Heat Transfer Performance of a Heat Spreader According to Verifying the Height of between Evaporation and Condensation

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**Key Words:** Screen mesh(스크린 메쉬), Wick(웁), Heat spreader(히트 스프레더)

**Abstract :** The present study proposes a new structure for a heat spreader which could embody a thin thickness, any shapes and high heat flux per unit area. It is on the structure for the formation of vapor passages and the support of the case of the heat spreader. A screen mesh is used as the one. To verify the validity of the one, the heat spreader of 1.5mm thickness was made with 14 mesh and 100 mesh number. In this paper, Thermal performance test of heat spreader conducted in order to compare with the heat transfer performance of verifying height of the heat spreader between evaporation and condensation. As the results, The heat spreader has excellent cooling and heat transfer performance.