

Thermoelectric cooler features three semiconductor thermocouples, each consisting of two semiconductor branches—one of n-type and one of p-type conductivity—connected to each other by an electrically conductive junction plate. Each branch has a current lead for connection to an external circuit. The branches are of different heights and are connected to each other by a single additional conductive element. The contacts of the additional conductive elements with the thermocouple branches are located on the surfaces of the branches between the connecting plate and the current lead. The thermocouples are in contact with each other through an electrically insulating layer with high thermal conductivity. The thermocouples have a stepped configuration.