

## Peltier Hybrid Current Leads

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For operating cryostat devices, We have developed experimental hybrid current leads using the Peltier elements. The Peltier hybrid current leads(PCL) designed for 100A devices. As Gold coating and using the silver past, We can reduced the electric resistance. As result of our experiments, We Confirmed that PCL's normal metal section cool down to 238.3K at 295K. According to previous calculation, Peltier elements can cool down to 221.5K at room-temperature. So, to reducing electric resistance and improving thermal conductance, We soldered Peltier elements and normal metal lead sections.

Keywords : Peltier, Peltier effect, Current leads, Thermopower, Thermalconductance, Superconductivity